



360056

Sentinel Wells Quarterly Monitoring Report January 2007

**1190505040 -- Madison County -- ILR000128249
The Hartford Area Hydrocarbon Plume Site
Hartford, Illinois**

March 23, 2007

Bureau Veritas Project No. 07003-003095.15-007



Prepared for:
The Hartford Working Group
Hartford, Illinois

BUREAU VERITAS NORTH AMERICA, INC.
Health, Safety, and Environmental Services
3140 Finley Road
Downers Grove, Illinois 60515
630.795.3200
www.us.bureauveritas.com



CONTENTS

<u>Section</u>		<u>Page</u>
1.0	<u>INTRODUCTION</u>	1
2.0	<u>WELL GAUGING</u>	2
3.0	<u>GROUNDWATER SAMPLE COLLECTION</u>	3
4.0	<u>GROUNDWATER ANALYTICAL RESULTS</u>	4
5.0	<u>CONCLUSIONS</u>	5
6.0	<u>RECOMMENDATIONS AND FUTURE ACTIVITIES</u>	5
7.0	<u>REFERENCES</u>	7

Figures

- 1 Village of Hartford, IL and Surrounding Area Map
- 2 Northern Hartford Site Features Map – Village of Hartford, Illinois
- 3 Area of LNAPL Presence in All Strata
- 4 Groundwater Flow Map – January 9-10, 2007 – Main Sand
- 5 Low Flow Sampling Monitoring Well Sampling Pump/Tubing Intake

Tables

- 1 Groundwater Elevation Data for 2007 in Vicinity of Sentinel Wells
- 2 Compound/Analyte List for Water Samples
- 3 Sample Container, Preservation, and Holding Time Requirements for Water Samples
- 4 Summary of Groundwater Analytical Results for Sentinel Wells - BETX and MTBE
- 5 Summary of Groundwater Analytical Results for Sentinel Wells - Metals (Total and Dissolved)
- 6 Summary of Groundwater Analytical Results for Sentinel Wells - General Chemistry and Natural Attenuation Parameters

Appendices

- A Monitoring Well Inspection Report
- B Summary of Indicator Parameter Measurements – January 2007



1.0 INTRODUCTION

This quarterly monitoring report for the five sentinel wells located within Hartford, Illinois (Figure 1) was prepared by Bureau Veritas North America, Inc. (Bureau Veritas) (formerly Clayton Group Services, Inc.) on behalf of the Hartford Working Group (HWG). The HWG is comprised of the Atlantic Richfield Company, The Premcor Refining Group Inc., Shell Oil Products US, and Sinclair Oil Corporation. The five sentinel wells (HMW-25 through HMW-29) were installed to monitor for the possible migration of Light Non-Aqueous Phase Liquid (LNAPL) or associated dissolved phase constituents toward the Hartford Well Head Protection Area (WHPA). The LNAPL is located within northern Hartford. The WHPA is the surface area near the two active Hartford municipal water supply wells, which are located in the southwestern portion of Hartford (McGuire et al. 2001). According to McGuire, et al. (2001), the WHPA may provide recharge to the aquifer over a five-year period. Figure 2 shows the location of the sentinel wells, the Hartford municipal water supply wells and the WHPA.

The monitoring and reporting work was done in accordance with the monitoring program developed under Paragraph 47 of the Administrative Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) in the Matter of The Hartford Area Hydrocarbon Plume Site (Docket No. R7003-5-04-001) (USEPA undated). Paragraph 47 of the AOC required that the five sentinel wells be sampled quarterly for one year, in accordance with the *Sentinel Wells Work Plan* approved by the USEPA on November 21, 2003 (Clayton 2003).

The sentinel wells were first sampled in December 2003. Quarterly monitoring of the sentinel wells, for the required one-year period, commenced in April 2004. Subsequent quarterly monitoring was conducted in July and October 2004, and in January and April 2005. During these events, groundwater samples were analyzed for Skinner List parameters: volatile organic compounds; 1,4-dioxane; semi-volatile organic compounds; total metals; and total cyanide. In addition, groundwater samples were also analyzed for "General Chemistry" parameters such as alkalinity, chemical oxygen demand, chloride, hardness, sulfate, total dissolved solids, total sulfide, total suspended solids, and dissolved metals.

After completion of the first year of quarterly sentinel well monitoring, Clayton (2005a) on behalf of the HWG and in accordance with the AOC, presented recommendations for a revised groundwater monitoring program. These recommendations included a reduced laboratory groundwater analysis list.



On April 14, 2005, the USEPA and the Illinois Environmental Protection Agency (Agencies) agreed with the HWG that future sentinel well analytical parameters would consist of benzene, ethylbenzene, toluene, and total xylenes (BETX), methyl tertiary butyl ether (MTBE), and Skinner List metals (total and dissolved), starting with the July 2005 sampling event (Clayton 2005b).

This report presents the results of the January 2007 quarterly groundwater monitoring activities, which included a comprehensive well gauging event in Hartford. Discussions of the comprehensive well gauging, groundwater sample collection, groundwater analytical results, and conclusions are presented in Sections 2.0 through 5.0. Recommendations and future activities are presented in Section 6.0 with references presented in Section 7.0.

2.0 WELL GAUGING

The hydrogeology in northern Hartford consists of four hydrostratigraphic units identified in descending order as the North Olive Stratum, the Rand Stratum and the EPA Stratum, all of which overlie the Main Sand (Clayton 2004a). The Main Sand has been subdivided into Main Silt and Main Sand based on its composition (i.e., percentage of silt versus sand content). These four hydrostratigraphic units are overlain and bounded by several clay deposits identified (in descending order) as the A Clay, B Clay, C Clay, and D Clay (Clayton 2005c). The A Clay forms the surface layer over the entirety of northern Hartford, while the B Clay separates the North Olive and Rand Strata. The C Clay separates the Rand and EPA Strata, and the D Clay separates the EPA and Main Sand Strata. The Main Sand serves as the aquifer for the area. The sentinel wells are screened in the Main Sand as the Hartford municipal water supply wells obtain water from the Main Sand. More detailed information on the hydrostratigraphic units is provided in the December 2005 *LNAPL Active Recovery System Conceptual Site Model* (Clayton 2005d) and the January 2006 *Dissolved Phase Groundwater Investigation Report* (Clayton 2006).

The first quarter 2007 well gauging event was performed in Hartford during the week of January 8, 2007. The sentinel wells were inspected and evaluated with respect to their continued suitability for both gauging and groundwater monitoring. The sentinel wells were determined to be in satisfactory condition for continued use in the monitoring program. The results of the monitoring well inspections are included in Appendix A.



The gauging event was conducted to determine groundwater depths and apparent LNAPL thickness (if present) in order to determine groundwater flow directions and delineate the current horizontal extent of gauged LNAPL. The January 2007 groundwater and LNAPL gauging data from the area of the sentinel wells are summarized in Table 1. The area of LNAPL presence, in all strata, in the vicinity of the sentinel wells is shown in Figure 3.

The January 2007 groundwater elevation data for the Main Sand indicated the flow direction underlying Hartford was primarily northerly in the area of the sentinel wells (Figure 4). Hartford Municipal Well #4 was in operation at the time of the January gauging. The overall groundwater flow direction in January 2007 was consistent with historical interpretations.

The natural movement of groundwater (westerly) has been altered in the Hartford vicinity (i.e., Hartford, Roxana and Wood River) due to large-scale industrial water pumpage. The combined pumping rate in this area is greater than 10,000 gallons per minute according to Farmayan, et al. (1998). These withdrawals of water have created groundwater cones of depression in the vicinity of Hartford. In general, the effect of this drawdown is groundwater in the Main Sand flows to the north and northwest.

3.0 GROUNDWATER SAMPLE COLLECTION

Groundwater sample collection activities were conducted on January 15, 2007 for sentinel wells HMW-25, HMW-26, HMW-27, and HMW-28 and on January 16, 2007 for sentinel well HMW-29. Each well was purged and sampled using dedicated low-flow sampling pumps and polypropylene tubing, in accordance with Bureau Veritas' purging and sampling Standard Operating Procedure (SOP) 415a (Clayton 2005e). A flow chart illustrating the SOP 415a purging and sampling technique is presented in Figure 5. Upon collection, groundwater samples were placed in laboratory-supplied, pre-preserved (if appropriate) containers. After collection, samples were immediately labeled, placed in a cooler containing ice and delivered under chain-of-custody procedures to Teklab, Inc. of Collinsville, Illinois for laboratory analysis. The purged groundwater removed from each well was temporarily stored in a tank, equipped with secondary containment and located in a secure area within Hartford, before removal by a waste disposal contractor.



Water quality parameters including temperature, pH, oxidation-reduction potential, dissolved oxygen, turbidity, and specific conductivity were electronically measured and recorded using a calibrated Mini-Troll with an associated Pocket PC (in addition to the field logbook) during purging and prior to sample collection. The downloaded data logger indicator parameter records for the January 2007 event are included in Appendix B.

Groundwater samples were analyzed for BETX, MTBE and Skinner List (total and dissolved) metals, as agreed to by the Agencies and the HWG on April 14, 2005 (Clayton 2005b). In addition, sentinel well groundwater samples were electively analyzed for general chemistry parameters and, since October 2005, natural attenuation parameters. Specifically, these natural attenuation parameters include ammonia (as nitrogen "N"), carbon, nitrate, nitrate plus nitrite (as N), nitrite (as N), total phosphorus, and dissolved phosphorus. These parameters have been analyzed to develop a better understanding of background conditions. The practical quantitation limits and analytical methods are presented in Table 2. A list of required containers, with applicable preservation requirements (if appropriate) for each parameter, is presented in Table 3.

4.0 GROUNDWATER ANALYTICAL RESULTS

None of the sentinel well groundwater samples collected in January 2007 revealed the presence of any quantifiable concentrations of BETX or MTBE.

The analytical results indicated eleven metals (antimony, arsenic, barium, cadmium, chromium, cobalt, iron, lead, nickel, vanadium, and zinc) were detected. With the exception of one constituent, the detected concentrations were below 35 IAC Part 742, Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Groundwater Remediation Objectives (GROs) for Class I groundwater (Illinois Pollution Control Board, 1997). Iron was detected at HMW-26 [25.3 milligrams per liter (mg/L) (total) and 24.4 mg/L (dissolved)] and HMW-29 [6.48 mg/L (total) and 6.74 (dissolved)] at concentrations exceeding the TACO GROs of 5.0 mg/L for this constituent. Iron is an elective parameter and is not a Skinner List metal. An evaluation of the Quality Assurance/Quality Control samples from this monitoring event revealed no concerns.



Historical summaries of laboratory analytical results for BETX and MTBE, and Skinner List Metals, are presented in Tables 4 and 5, respectively. A historical summary of analytical results for the General Chemistry and Natural Attenuation parameters is presented in Table 6. The groundwater analytical results for the January 2007 quarterly sampling of the sentinel wells were consistent with historical observations. The laboratory analytical reports are maintained in Bureau Veritas' files at their Downers Grove, Illinois office. Electronic copies of the analytical reports were uploaded to the site portal on January 30, 2007.

5.0 CONCLUSIONS

Based on a review of the groundwater analytical results, the sentinel wells have not been impacted by the LNAPL underlying northern Hartford. This conclusion is based on the fact that no BETX or MTBE constituents were detected at quantifiable concentrations, and the fact that none of the identified inorganic constituents were detected above applicable TACO Tier 1 GROs for Class I groundwater (with the exception of iron). The conclusion is also based on the groundwater flow mapping of the Main Sand, which shows flow in the area of the LNAPL plume in northern Hartford is to the north, away from the Hartford WHPA and the Hartford municipal water supply wells.

6.0 RECOMMENDATIONS AND FUTURE ACTIVITIES

The five sentinel wells have been monitored between December 2003 and January 2007 (13 quarters) for BETX, MTBE and Skinner List total metals with Skinner List dissolved metals monitored from January 2005 to January 2007 (see Tables 4 and 5) (other parameters were also analyzed from December 2003 to April 2005, at which time a reduced laboratory groundwater analysis list was approved by the Agencies). The HWG has also electively sampled the five sentinel wells for general chemistry parameters from October 2004 through January 2007, and natural attenuation parameters from October 2005 through January 2007 (see Table 6).

None of the Skinner List metals parameters, required by the AOC, have been detected in the sentinel wells at concentrations above comparison values (TACO Tier 1 GROs for Class I Groundwater) with the exception of total lead. A similar evaluation of these parameters, conducted as part of the site wide



quarterly groundwater monitoring program, indicates only arsenic and lead have exhibited concentrations above comparison values on a consistent, non-sporadic basis.

Based on the historical metals data, the HWG proposes to reduce the metal analytes to only lead (total and dissolved) and arsenic (total and dissolved) for future groundwater monitoring. The HWG also proposes to reduce the frequency of sampling for general chemistry and natural attenuation parameters within the elective program from quarterly to annually (4th quarter only).

These modifications are based on the consistency of groundwater concentration data over the course of two years of quarterly groundwater monitoring. They are also based on the relative insignificance of the general chemistry and natural attenuation indicator parameter data, given the lack of quantifiable BETX or MTBE concentrations in the sentinel wells, and in consideration of the observed groundwater flow.

Sampling of general chemistry and natural attenuation indicator parameters in the sentinel wells may be re-evaluated based on documented changes in groundwater concentration trends or the general conceptual site model.

The new sentinel well parameter list is proposed for implementation during the next quarterly sampling event (Second Quarter 2007). This event will be conducted in accordance with the approved Sentinel Wells Work Plan as required by Paragraph 47 of the AOC, as well as the initial reduced parameters agreement (Clayton 2005b) between HWG and the Agencies. A comprehensive well gauging event will also be conducted at that time.

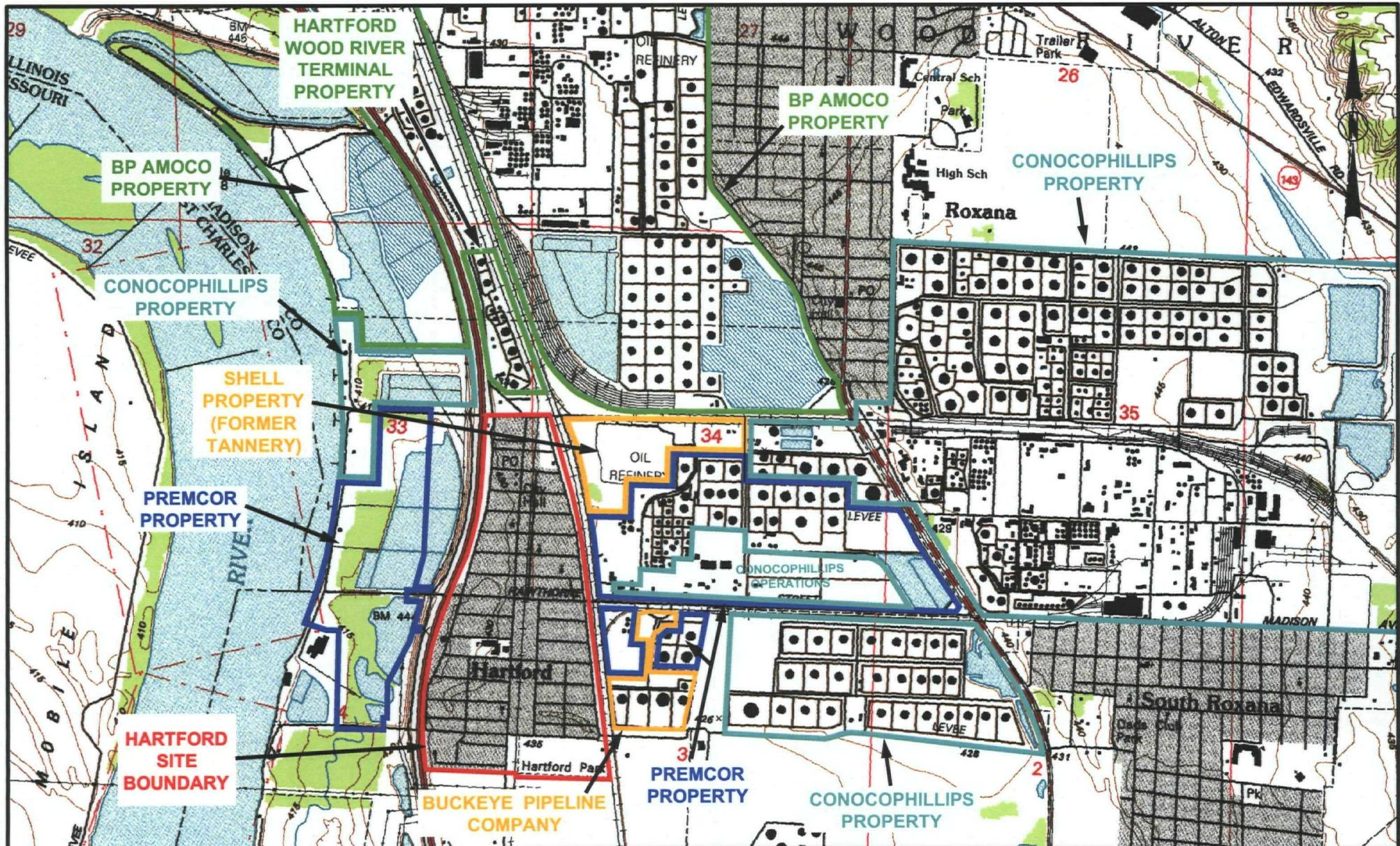


7.0 REFERENCES

- Clayton Group Services, Inc., October 16, 2003. *Conceptual Site Model, Village of Hartford Work Plan*, Hartford, Illinois (aka *Sentinel Wells Work Plan*).
- Clayton Group Services, Inc., April 8, 2004a. *FPH CPT/ROST™ Subsurface Investigation Report and FPH Monitoring Well and Soil Sampling Plan for the Village of Hartford, Illinois*.
- Clayton Group Services, Inc., January 7, 2004b. *Investigation Plan to Define the Extent of Free Phase and Dissolved Phase Hydrocarbons in the Village of Hartford, Illinois*.
- Clayton Group Services, Inc., April 8, 2005a. *Sentinel Wells Quarterly Monitoring Report January 2005, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois*.
- Clayton Group Services, Inc., June 22, 2005b. *Modification of Analytical Parameter List for Quarterly Sentinel Well Monitoring, The Hartford Area Hydrocarbon Plume Site, Village of Hartford, Illinois*.
- Clayton Group Services, Inc., April 4, 2005c. *Work Plan Site Wide Free Product Investigation, The Premcor Refining Group Inc. – Hartford Facility, Hartford, Illinois*.
- Clayton Group Services, Inc., December 15, 2005d. *LNAPL Active Recovery System Conceptual Site Model, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois*.
- Clayton Group Services, Inc., May 24, 2005e. *Work Plan Dissolved Phase Groundwater Investigation, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois*.
- Clayton Group Services, Inc., January 4, 2006. *Dissolved Phase Groundwater Investigation Report, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois*.
- Clayton Group Services, Inc., in-progress. *Quarterly Groundwater Monitoring Report October 2006, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois*.
- Farmayan, W., C. Neaville, M. Petkovsky and L. Drzewiecki. March 1998. *Groundwater Flow Model for the Shell Wood River Refining Company*.
- Illinois Pollution Control Board, 1997. *Tiered Approach to Corrective Action Objectives: 35 IAC Part 742*. Adopted rule, Final Order June 5, 1997. Last amended February 2002.
- McGuire, M., J. Keller, K. Miller, and S. Esling, 2001. *Delineation of a Well Head Protection Area Hartford, Illinois*.
- US Army Corps of Engineers, 2005. Mississippi River at Melvin Price Lock and Dam (Alton, IL). (<http://www2.mvr.usace.army.mil/WaterControl/stationinfo2.cfm?sid=MPRICE&fid=ALNI2&dt=S>).
- United States Environmental Protection Agency, Region 5, Chicago, Illinois. *In the Matter of the Hartford Area Hydrocarbon Plume Site*. (Docket No. R7003-5-04-001).



FIGURES



** NOT TO SCALE **

SOURCE:

USGS 7.5 MINUTE SERIES TOPOGRAPHIC MAP
(WOOD RIVER, ILL.-MO. - rev.1994)

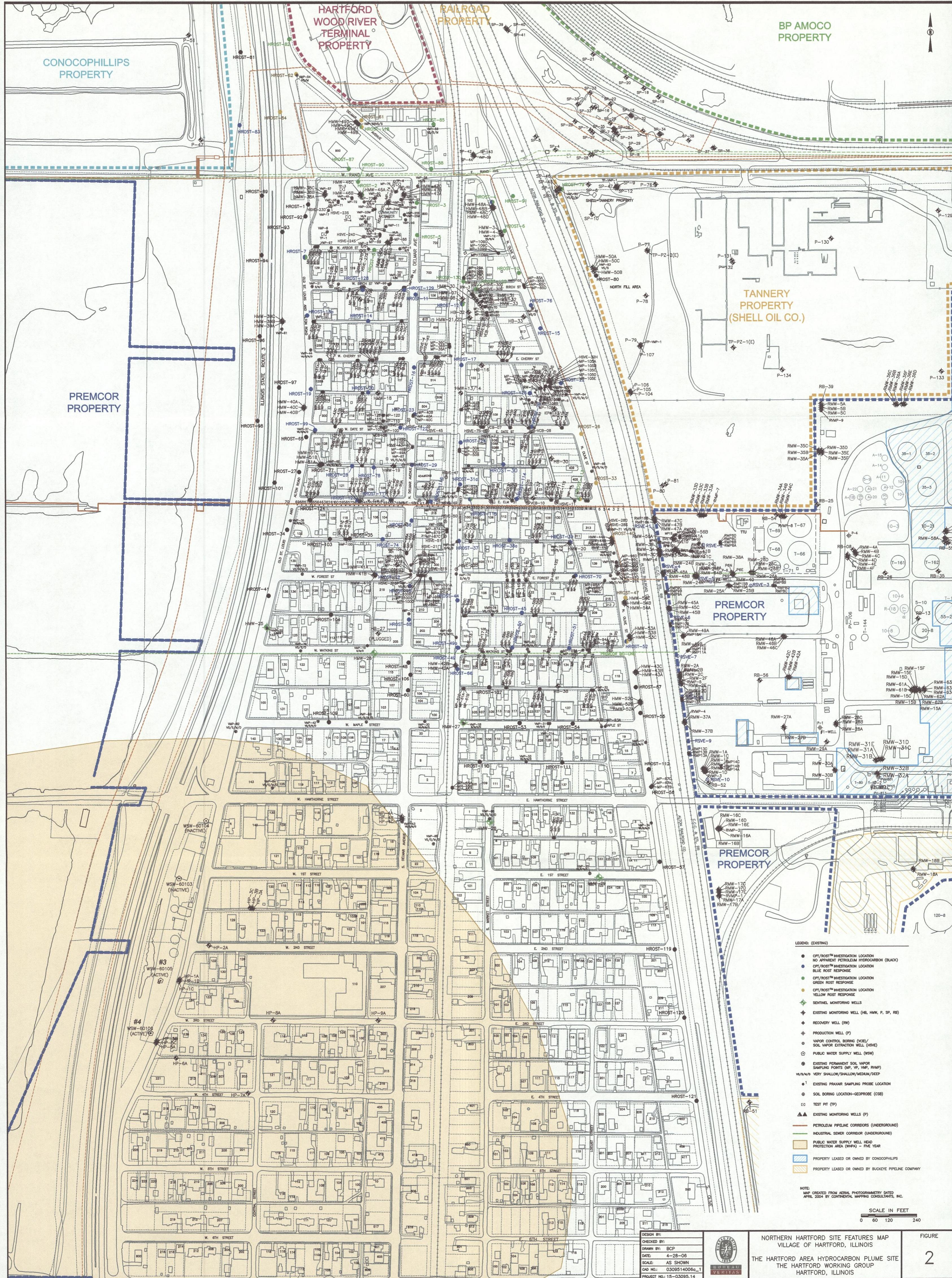
CHK BY		
DWN BY	BCP	
DATE	8-8-06	
SCALE	AS SHOWN	
CAD NO.	0309512001B	
PRJ NO.	15-03095.14	

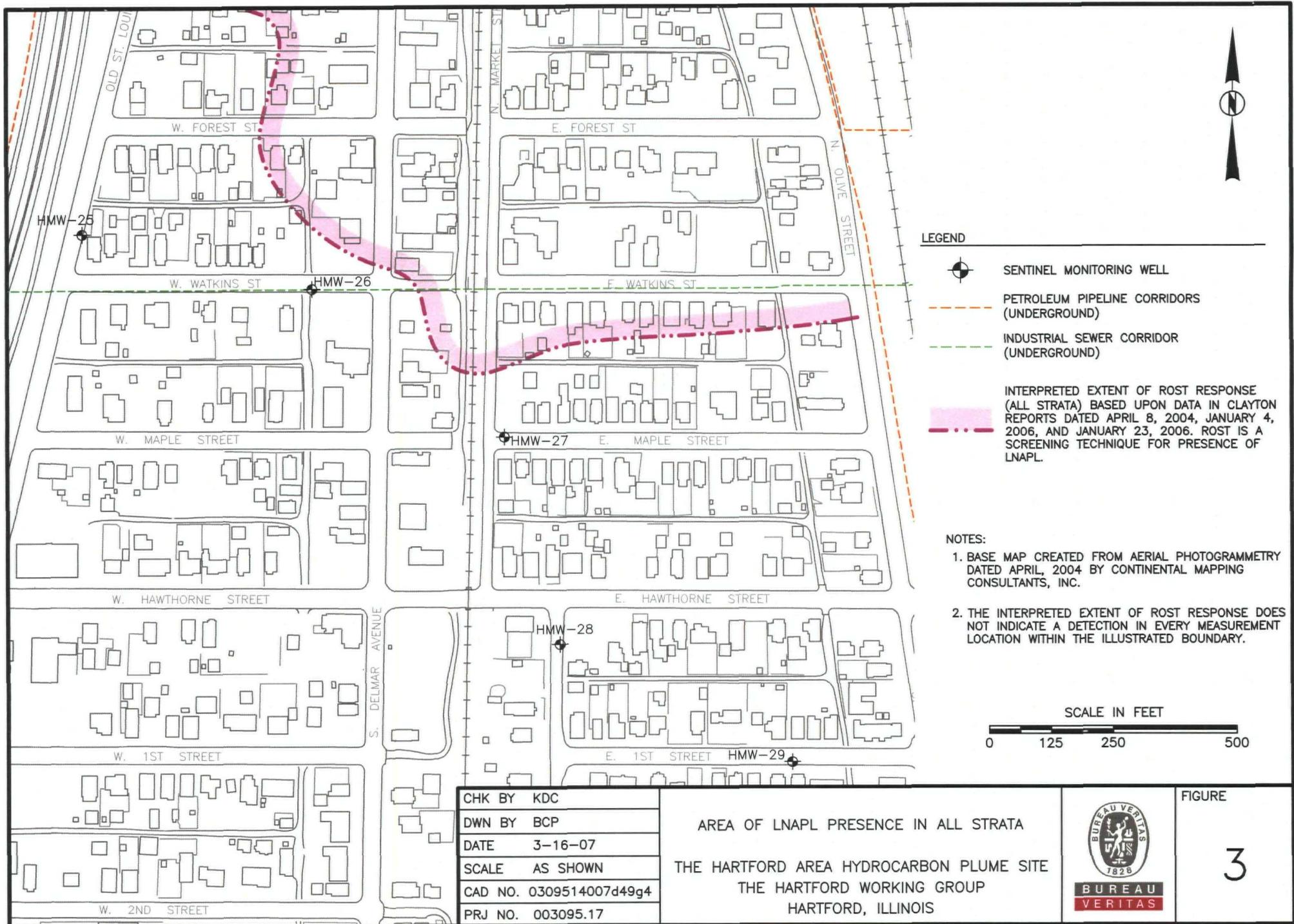
VILLAGE OF HARTFORD, IL
AND SURROUNDING AREA MAP
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS

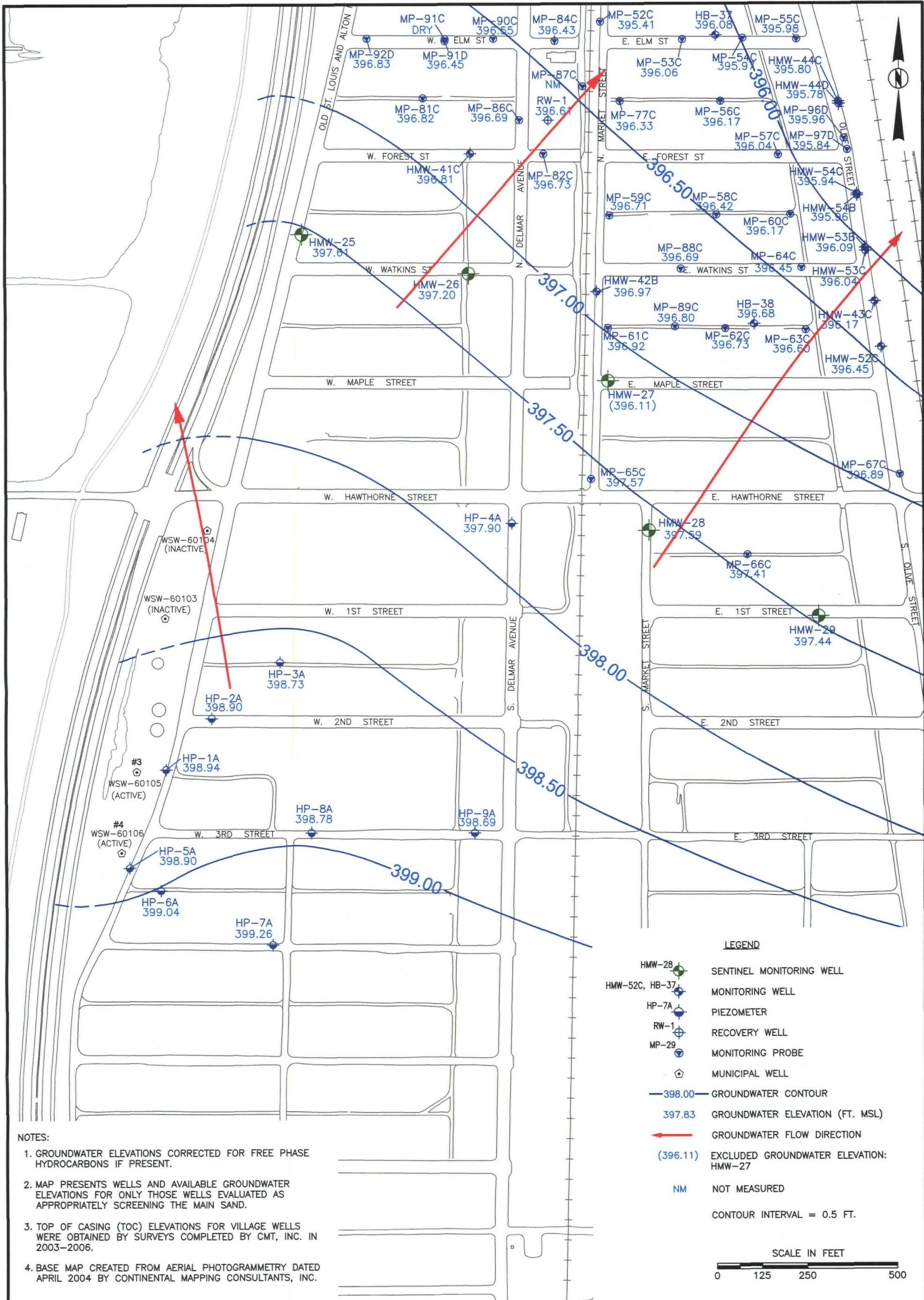


FIGURE

1







CHECK BY BL	
DRAWN BY BCP	
DATE 3-16-07	
SCALE AS SHOWN	
CAD NO. 0309507e128a	
PRJ NO. 003095.17	

GROUNDWATER FLOW MAP
JANUARY 9-10, 2007
MAIN SAND
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



BUREAU
VERITAS

**Low Flow Sampling
Monitoring Well Sampling
Pump/Tubing Intake**



**BUREAU
VERITAS**

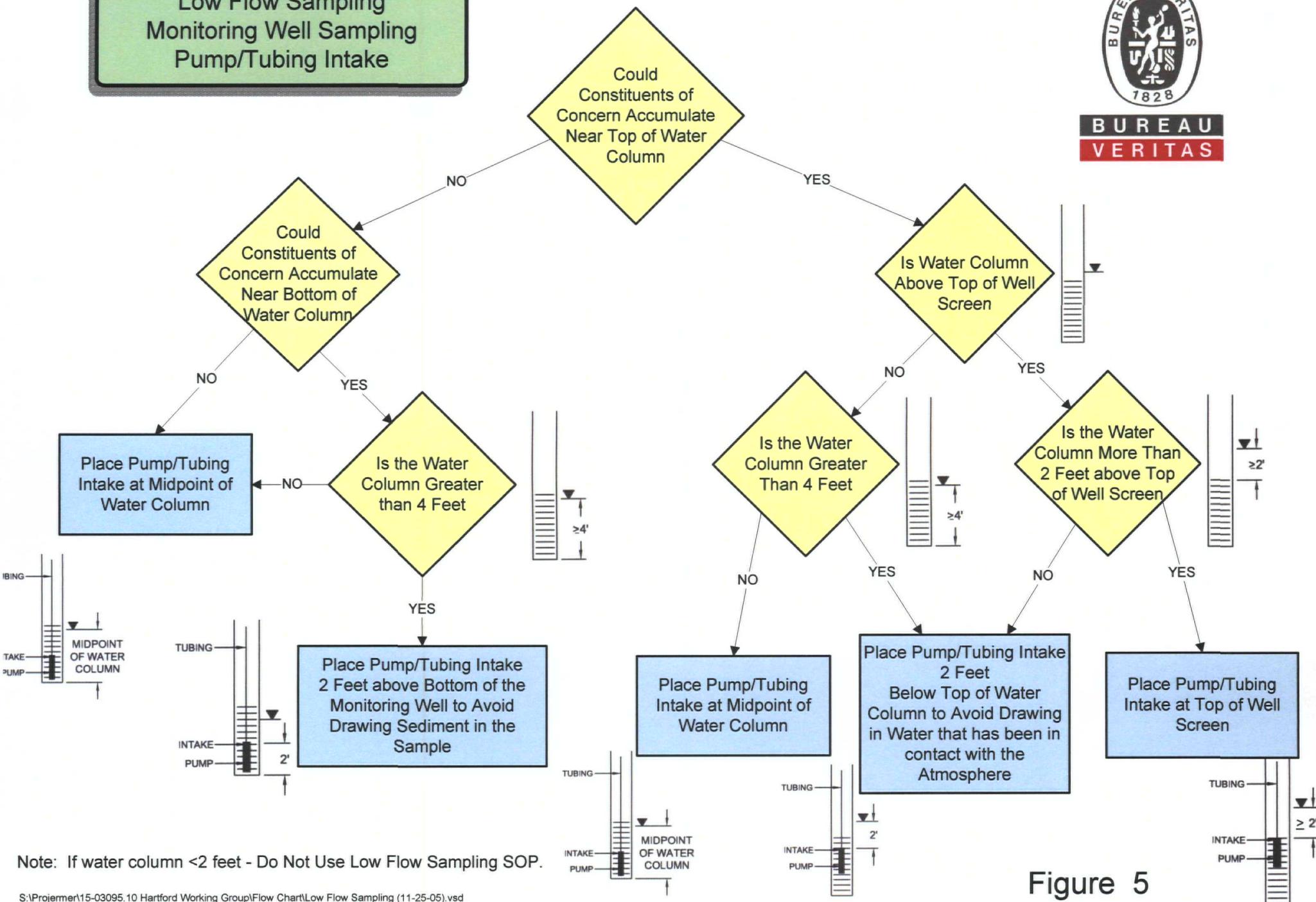


Figure 5



TABLES

TABLE 1
GROUNDWATER ELEVATION DATA FOR 2007 IN VICINITY OF SENTINEL WELLS
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED ¹	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do. (ft)	Piezometric Surface Elevation ² (ft)
HB-37	Main Sand	01/10/07	431.77	35.64	35.86	396.13	395.91	0.22	0.02	396.08
HB-38	Main Sand	01/09/07	429.92	NA	33.24	NA	396.68	0.00	0.00	396.68
HMW-25	Main Sand	01/10/07	427.45	NA	29.84	NA	397.61	0.00	0.00	397.61
HMW-26	Main Sand	01/10/07	425.20	NA	28.00	NA	397.20	0.00	0.00	397.20
HMW-27 (T 7/13/04-4/19/05)	Main Sand	01/09/07	430.51	NA	34.40	NA	396.11	0.00	0.00	396.11
HMW-28	Main Sand	01/09/07	430.97	NA	33.38	NA	397.59	0.00	0.00	397.59
HMW-29	Main Sand	01/09/07	429.99	NA	32.55	NA	397.44	0.00	0.00	397.44
HMW-41 C	Main Sand	01/10/07	425.85	NA	29.04	NA	396.81	0.00	0.00	396.81
HMW-42 B	Main Sand	01/09/07	431.46	NA	34.49	NA	396.97	0.00	0.00	396.97
HMW-43 C (T 1/11/05)	Main Sand	01/09/07	428.96	NA	32.79	NA	396.17	0.00	0.00	396.17
HMW-44 C	Main Sand	01/09/07	428.38	32.16	33.97	396.22	394.41	1.81	0.25	395.80
HMW-44 D (T 11/11/05)	Main Sand	01/09/07	429.76	NA	33.98	NA	395.78	0.00	0.00	395.78
HMW-52 C	Main Sand	01/09/07	427.83	NA	31.38	NA	396.45	0.00	0.00	396.45
HMW-53 B	Main Silt (Rand Horizon)/ Main Sand	01/09/07	429.76	33.39	34.60	396.37	395.16	1.21	0.10	396.09
HMW-53C	Main Sand	01/09/07	429.66	NA	33.62	NA	396.04	0.00	0.00	396.04
HMW-54 B	Main Sand	01/09/07	429.55	33.27	34.66	396.28	394.89	1.39	0.13	395.96

TABLE 1
GROUNDWATER ELEVATION DATA FOR 2007 IN VICINITY OF SENTINEL WELLS
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Dol (ft)	Piezometric Surface Elevation ² (ft)
HMW-54 C	Main Sand	01/09/07	429.56	NA	33.62	NA	395.94	0.00	0.00	395.94
HP-01A (T 10/7/05)	Main Sand	01/09/07	425.84	NA	26.90	NA	398.94	0.00	0.00	398.94
HP-02	Main Sand	01/09/07	429.92	NA	31.02	NA	398.90	0.00	0.00	398.90
HP-03A (T 10/7/05)	Main Sand	01/09/07	429.28	NA	30.55	NA	398.73	0.00	0.00	398.73
HP-04A	Main Sand	01/09/07	430.94	NA	33.04	NA	397.90	0.00	0.00	397.90
HP-05A	Main Sand	01/09/07	424.42	NA	25.52	NA	398.90	0.00	0.00	398.90
HP-06	Main Sand	01/09/07	425.88	NA	26.84	NA	399.04	0.00	0.00	399.04
HP-07	Main Sand	01/09/07	429.04	NA	29.78	NA	399.26	0.00	0.00	399.26
HP-08	Main Sand	01/09/07	429.81	NA	31.03	NA	398.78	0.00	0.00	398.78
HP-09	Main Sand	01/09/07	431.45	NA	32.76	NA	398.69	0.00	0.00	398.69
MP-52 C	Main Sand	01/09/07	429.99	34.57	34.60	395.42	395.39	0.03	0.01	395.41
MP-53 C	Main Sand	01/09/07	430.52	34.33	34.90	396.19	395.62	0.57	0.05	396.06
MP-54 C	Main Sand	01/09/07	430.07	33.74	35.30	396.33	394.77	1.56	0.22	395.97
MP-55 C	Main Sand	01/10/07	429.67	33.34	34.85	396.33	394.82	1.51	0.17	395.98
MP-56 C	Main Sand	01/09/07	430.15	NA	33.98	NA	396.17	0.00	0.00	396.17
MP-57 C	Main Sand	01/09/07	429.15	32.85	33.96	396.30	395.19	1.11	0.07	396.04
MP-58 C	Main Sand	01/09/07	430.33	33.88	34.03	396.45	396.30	0.15	0.01	396.42

TABLE 1
GROUNDWATER ELEVATION DATA FOR 2007 IN VICINITY OF SENTINEL WELLS
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do (ft)	Piezometric Surface Elevation (ft)
MP-59 C	Main Sand	01/09/07	429.90	33.12	33.41	396.78	396.49	0.29	0.02	396.71
MP-60 C	Main Sand	01/09/07	429.21	32.72	34.13	396.49	395.08	1.41	0.16	396.17
MP-61 C	Main Sand	01/09/07	430.00	NA	33.08	NA	396.92	0.00	0.00	396.92
MP-62 C	Main Sand	01/09/07	428.94	NA	32.21	NA	396.73	0.00	0.00	396.73
MP-63 C	Main Sand	01/09/07	429.29	NA	32.69	NA	396.60	0.00	0.00	396.60
MP-64 C	Main Sand	01/09/07	428.55	31.76	33.26	396.79	395.29	1.50	0.19	396.45
MP-65 C	Main Sand	01/09/07	431.42	NA	33.85	NA	397.57	0.00	0.00	397.57
MP-66 C	Main Sand	01/09/07	430.79	NA	33.38	NA	397.41	0.00	0.00	397.41
MP-67 C	Main Sand	01/09/07	430.19	NA	33.30	NA	396.89	0.00	0.00	396.89
MP-77C	Main Sand	01/09/07	430.46	33.89	34.95	396.57	395.51	1.06	0.07	396.33
MP-81 C	Main Sand	01/10/07	425.40	NA	28.58	NA	396.82	0.00	0.00	396.82
MP-82 C	Main Sand	01/10/07	431.61	NA	34.88	NA	396.73	0.00	0.00	396.73
MP-84 C	Main Silt (Rand Horizon)/ Main Sand	01/10/07	432.10	35.27	36.99	396.83	395.11	1.72	0.25	396.43
MP-86 C	Main Sand	01/10/07	431.20	34.48	34.62	396.72	396.58	0.14	0.01	396.69
MP-87 C	Main Sand	01/10/07	432.08	--	--	--	--	--	--	--
MP-88 C	Main Sand	01/09/07	430.51	33.76	34.02	396.75	396.49	0.26	0.02	396.69

TABLE 1
GROUNDWATER ELEVATION DATA FOR 2007 IN VICINITY OF SENTINEL WELLS
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do ¹ (ft)	Piezometric Surface Elevation ² (ft)
MP-89 C	Main Sand	01/09/07	429.25	NA	32.45	NA	396.80	0.00	0.00	396.80
MP-90 C	Main Silt (Rand Horizon)/ Main Sand	01/10/07	429.95	33.18	34.13	396.77	395.82	0.95	0.08	396.55
MP-91 C	Main Silt	01/10/07	425.98	NA	DRY	NA	--	0.00	0.00	--
MP-91 D	Main Sand	01/10/07	425.96	NA	29.51	NA	396.45	0.00	0.00	396.45
MP-92 D	Main Silt (Rand Horizon)/ Main Sand	01/10/07	427.98	NA	31.15	NA	396.83	0.00	0.00	396.83
MP-96D	Main Sand	01/09/07	429.48	33.26	34.38	396.22	395.10	1.12	0.07	395.96
MP-97D	Main Sand	01/09/07	429.31	33.09	34.73	396.22	394.58	1.64	0.22	395.84
RW-1	Main Sand	01/10/07	433.78	37.08	37.48	396.70	396.30	0.40	0.03	396.61

NOTES:

NA = Not Applicable

-- = No data

PL = Permeable Lense

SG = Specific gravity of hydrocarbon determined to be an average of 0.77 for data recorded during and after 09/03.

(T xx/xx/xxxx) = Date transducer installed in well, however, data may be from miniTROLL or manual gauging.

1 = D_0 is a normalized volume of LNAPL (ft^3/ft^2) per unit surface area, but is expressed as a thickness (in units of feet).

2 = Piezometric surface elevation = $[(A)-(C)] + S.G.[(C)-(B)]$

HMW-25 through HMW-29 installed by Clayton in 12/03.

Remaining HMW-series and MP-series installed by Clayton during 2004 through 2006.

Remaining wells installed by others.

TOC elevations surveyed to USGS datum by CMT.

Top of casing elevation changes present in the table indicate that the associated wells have been re-surveyed.

TABLE 2
COMPOUND/ANALYTE LIST FOR WATER SAMPLES - VOCs & Inorganics
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, Illinois

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT * (mg/L)	PRACTICAL QUANTITATION LIMIT * (mg/L)	ACCEPTABLE DETECTION LIMIT ** (mg/L)
	Source	Method No.	Source	Method No.				
VOCs	SW-846	5030	SW-846	8260	Benzene	0.5	2	5
	SW-846	5030	SW-846	8260	Ethylbenzene	1	5	700
	SW-846	5030	SW-846	8260	Methyl tertiary butyl ether (MTBE)	0.5	2	70
	SW-846	5030	SW-846	8260	Toluene	1	5	1,000
	SW-846	5030	SW-846	8260	Xylenes (total)	1	5	10,000
Metals	SW-846	3020A	SW-846	7041	Antimony	0.0017	0.005	0.006
	SW-846	3020A	SW-846	7060A	Arsenic	0.0007	0.003	0.05
	SW-846	3005A	SW-846	6010	Barium	0.0024	0.005	2
	SW-846	3005A	SW-846	6010	Beryllium	0.0003	0.001	0.004
	SW-846	3005A	SW-846	6010	Cadmium	0.0003	0.002	0.005
	SW-846	3005A	SW-846	6010	Chromium-Total	0.004	0.01	0.1
	SW-846	3005A	SW-846	6010	Cobalt	0.0022	0.01	1
	SW-846	3005A	SW-846	6010	Iron	0.007	0.02	5
	SW-846	3020A	SW-846	7421	Lead	0.0004	0.002	0.0075
	--	--	SW-846	7470	Mercury	0.000051	0.0002	0.002
	SW-846	3005A	SW-846	6010	Nickel	0.0033	0.01	0.1
	SW-846	3020A	SW-846	7740	Selenium	0.0035	0.006	0.05
	SW-846	3005A	SW-846	6010	Silver	0.003	0.01	0.05
	SW-846	3005A	SW-846	6010	Vanadium	0.0032	0.01	0.049
	SW-846	3005A	SW-846	6010	Zinc	0.0021	0.01	5

TABLE 2
COMPOUND/ANALYTE LIST FOR WATER SAMPLES - VOCs & Inorganics
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, Illinois

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT* (mg/L)	PRACTICAL QUANTITATION LIMIT* (mg/L)	ACCEPTABLE DETECTION LIMIT ** (mg/L)
	Source	Method No.	Source	Method No.				
General	--	--	Standard Method	M2320B	Alkalinity, Total (as, Ca, CO ₃)	0	0	NA
	--	--	EPA Method	E350.1	Ammonia as N	0.04	0.1	NA
	--	--	SW-846	9251.0	Chloride	0.6	1	200
	--	--	Standard Method	M5220D	COD	7.3	20	NA
	--	--	SW-846	9010B, 9014	Cyanide Total	0.003	0.007	0.2
	--	--	SW-846	9012A	Cyanide Total	0.003	0.007	0.2
	--	--	Standard Method	M2340C	Hardness (as, Ca, CO ₃)	3	5	NA
	--	--	EPA Method	E353.2	Nitrate as N	0.010	0.05	10.0
	--	--	EPA Method	E353.2	Nitrate-Nitrite	0.010	0.05	NA
	--	--	EPA Method	E353.2	Nitrite as N	0.01	0.05	NA
	--	--	EPA Method	E353.3	Nitrite as N	0.01	0.01	NA
	--	--	EPA Method	E365.2	Phosphorus as P	0.01	0.02	NA
	--	--	EPA Method	E365.2 (D)	Phosphorus, Dissolved as P	0.01	0.02	NA
	--	--	SW-846	9036.0	Sulfate	40	40	400
	--	--	SW-846	9038.0	Sulfate	1.0	5	400
	--	--	Standard Method	M4500SD	Sulfide	0.013	0.50	NA
	--	--	Standard Method	M2540C	Total Dissolved Solids	10	20	NA
	--	--	EPA Method	E415.1	Total Organic Carbon	0.5	1	NA
	--	--	Standard Method	M2540D	Total Suspended Solids	5	6	NA

NOTES:

mg/L = Milligrams per liter.

µg/L = Micrograms per liter

NA = Not available

* = Method detection limit and practical quantitation limit as identified by Teklab, Inc. (Hennessy, 2007).

** = Acceptable detection limit is the IPCB TACO Tier 1 Groundwater Remediation Objective for Class I Groundwater.

-- = Not applicable

TABLE 3
SAMPLE CONTAINER, PRESERVATION, AND HOLDING TIME REQUIREMENTS FOR WATER SAMPLES
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, Illinois

PARAMETER	ANALYSIS	HOLDING TIME	CONTAINER	PRESERVATION
Organics	BETX and MTBE	14 days	3-40 ml VOC vials	HCl to pH < 2, no headspace Maintained at 4 +/- 2 degrees Celcius
Metals	Inorganic Metals	180 days	500 ml plastic jar	HNO ₃ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Mercury	28 days		
General	Alkalinity	14 days	1 L plastic jar	Maintained at 4 +/- 2 degrees Celcius
	Chloride	28 days		
	Sulfate	28 days		
	Hardness	180 days		
	Nitrite	48 hours		
	Total Dissolved Solids (TDS)	7 days		
	Total Suspended Solids (TSS)	7 days		
	Total Cyanide	14 days	250 ml plastic jar	NaOH to pH>12 Maintained at 4 +/- 2 degrees Celcius
	Chemical Oxygen Demand (COD)	28 days	500 ml plastic jar	H ₂ SO ₄ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Ammonia, Total	28 days		
	Phosphorus, Total	28 days		
	Nitrate +/- Nitrite	28 days		
	Phosphorus, Dissolved	28 days	250 ml plastic	H ₂ SO ₄ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Total Organic Carbon (TOC)	28 days	125 ml plastic	H ₂ SO ₄ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Sulfide, Total	7 days	250 ml plastic jar	NaOH and ZnAcetate to pH>9 Maintained at 4 +/- 2 degrees Celcius

Table 4
 Summary of Groundwater Analytical Results for Sentinel Wells
 BETX and MTBE

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT TYPE	SAMPLE ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene (total) (ug/l)	Methyl tert-butyl ether (ug/l)
COMPARISON VALUE				5.0	700	1000	10000	700
HMW-25	12/16/2003	Prim	HMW-25	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	04/22/2004	Prim	HMW-25/040422	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	07/07/2004	Prim	HMW-25/040707	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	07/07/2004	Dup 1	DUP-001/040707	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	10/19/2004	Prim	HMW-25/041019	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	01/21/2005	Prim	HMW-25/050121	0.6J	<5.0	2.7J	4.1J	<2.0
HMW-25	01/21/2005	Dup 1	Dup-001/050121	0.6J	<5.0	2.4J	3.9J	<2.0
HMW-25	02/03/2005	Prim	HMW-25/050203	0.5J	<5.0	<5.0	<5.0	NA
HMW-25	03/02/2005	Prim	HMW-25/050302	<2.0	<5.0	<5.0	<5.0	NA
HMW-25	03/02/2005	Prim	HMW-25/050302	<5.0	<5.0	<5.0	<5.0	NA
HMW-25	04/14/2005	Prim	HMW-25/050414	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	07/12/2005	Prim	HMW-25/050712	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	10/06/2005	Prim	HMW-25/051006	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	01/13/2006	Prim	HMW-25/060113	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	04/07/2006	Prim	HMW-25/060407	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	07/10/2006	Prim	HMW-25/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	10/11/2006	Prim	HMW-25/061011	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	01/15/2007	Prim	HMW-25/070115	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	01/15/2007	Dup 1	DUP-001/070115	<2.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Table 4
Summary of Groundwater Analytical Results for Sentinel Wells
BTEX and MTBE

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT		SAMPLE ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene (total) (ug/l)	Methyl tert-butyl ether (ug/l)
		TYPE							
COMPARISON VALUE									
HMW-26	12/16/2003	Prim	HWM-26	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	04/22/2004	Prim	HMW-26/040422	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	07/07/2004	Prim	HMW-26/040707	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	10/20/2004	Prim	HMW-26/041020	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	10/20/2004	Dup 1	Dup-001/041020	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	01/21/2005	Prim	HMW-26/050121	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	04/14/2005	Prim	HMW-26/050414	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	04/14/2005	Dup	DUP002/050414	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	07/12/2005	Prim	HMW-26/050712	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	10/06/2005	Prim	HMW-26/051006	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	01/12/2006	Prim	HMW-26/060112	<2.0	<5.0	<5.0	<5.0	<5.0	0.6J
HMW-26	04/07/2006	Prim	HMW-26/060407	<2.0	<5.0	<5.0	<5.0	<5.0	0.6J
HMW-26	07/10/2006	Prim	HMW-26/060710	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	10/11/2006	Prim	HMW-26/061011	<2.0	<5.0	<5.0	<5.0	<5.0	0.9J
HMW-26	10/11/2006	Dup 1	DUP-001/061011	<2.0	<5.0	<5.0	<5.0	<5.0	0.9J
HMW-26	01/15/2007	Prim	HMW-26/070115	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-27	12/16/2003	Prim	HWM-27	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-27	04/22/2004	Prim	HMW-27/040422	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-27	04/22/2004	Dup 1	DUP-01/040422	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Table 4
Summary of Groundwater Analytical Results for Sentinel Wells
BTEX and MTBE

The Hartford Working Group / Hartford, Illinois
1190505040 ~ Madison County - ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT TYPE	SAMPLE ID	Benzene	Ethylbenzene	Toluene	Xylene (total)	Methyl tert-butyl ether
				(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
COMPARISON VALUE				<5	700	1000	10000	70
HMW-27	07/07/2004	Prim	HMW-27/040707	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	10/20/2004	Prim	HMW-27/041020	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	01/21/2005	Prim	HMW-27/050121	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	04/19/2005	Prim	HMW-27/050419	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	07/12/2005	Prim	HMW-27/050712	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	10/07/2005	Prim	HMW-27/051007	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	01/12/2006	Prim	HMW-27/060112	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	04/06/2006	Prim	HMW-27/060406	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	07/10/2006	Prim	HMW-27/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	10/12/2006	Prim	HMW-27/061012	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	01/15/2007	Prim	HMW-27/070115	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	12/16/2003	Prim	HMW-28/031216	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	04/22/2004	Prim	HMW-28/040422	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	07/07/2004	Prim	HMW-28/040707	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	10/20/2004	Prim	HMW-28/041020	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	01/21/2005	Prim	HMW-28/050121	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	04/19/2005	Prim	HMW-28/050419	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	07/12/2005	Prim	HMW-28/050712	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	10/07/2005	Prim	HMW-28/051007	<2.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Table 4
Summary of Groundwater Analytical Results for Sentinel Wells
BTEX and MTBE

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT TYPE	SAMPLE ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene (total) (ug/l)	Methyl tert-butyl ether (ug/l)
COMPARISON VALUES								
HMW-28	01/13/2006	Prim	HMW-28/060113	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	04/06/2006	Prim	HMW-28/060406	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	07/10/2006	Prim	HMW-28/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	07/10/2006	Dup 1	DUP-001/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	10/12/2006	Prim	HMW-28/061012	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	01/15/2007	Prim	HMW-28/070115	<2.0R	<5.0R	<5.0	<5.0R	<2.0
HMW-29	12/17/2003	Prim	HMW-29	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	04/22/2004	Prim	HMW-29/040422	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	07/07/2004	Prim	HMW-29/040707	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	10/20/2004	Prim	HMW-29/041020	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	01/21/2005	Prim	HMW-29/052101	0.6J	<5.0	<5.0	<5.0	<2.0
HMW-29	02/06/2005	Prim	HMW-29/050206	<2.0	<5.0	<5.0	<5.0	NA
HMW-29	04/19/2005	Prim	HMW-29/050419	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	07/13/2005	Prim	HMW-29/050713	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	07/13/2005	Dup 1	DUP-001/050713	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	10/07/2005	Prim	HMW-29/051007	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	10/07/2005	Dup 1	DUP-001/051007	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	01/13/2006	Prim	HMW-29/060113	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	01/13/2006	Dup 1	DUP001/060113	<2.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Table 4
 Summary of Groundwater Analytical Results for Sentinel Wells
 BETX and MTBE

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County - ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT		SAMPLE ID	Benzene	Ethylbenzene	Toluene	Xylene (total)	Methyl tert-butyl ether
		TYPE	(ug/l)		(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
COMPARISON VALUE					5	700	1000	10000	70
HMW-29	04/06/2006	Prim	HMW-29/060406	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-29	04/06/2006	Dup. 1	DUP-001/060406	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-29	07/10/2006	Prim	HMW-29/060710	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-29	10/12/2006	Prim	HMW-29/061012	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-29	01/16/2007	Prim	HMW-29/070116	<2.0	<5.0R	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
	SAMPLE ID	HMW-25	HMW-25/040422	HMW-25/040707	DUP-001/040707	HMW-25/041019
	DATE	COMPARISON	12/16/2003	04/22/2004	07/07/2004	07/07/2004
RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1	Primary
Antimony	(mg/l)	0.006	<0.005	0.00235J	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	NA	NA	NA	NA
Arsenic	(mg/l)	0.05	0.00106J	<0.003	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	NA	NA	NA	NA
Barium	(mg/l)	2	0.318	0.238	0.256	0.257
Barium (Dissolved)	(mg/l)	2	NA	NA	NA	NA
Beryllium	(mg/l)	0.004	<0.001	<0.001	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	NA	NA	NA	NA
Cadmium	(mg/l)	0.005	<0.002	0.000400	0.0003J	0.0003J
Cadmium (Dissolved)	(mg/l)	0.005	NA	NA	NA	NA
Chromium	(mg/l)	0.1	0.00980J	0.00610J	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	NA	NA	NA	NA
Cobalt	(mg/l)	1	0.00450J	<0.010	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	NA	NA	NA	NA
Iron	(mg/l)	5	NA	NA	NA	NA
Iron (Dissolved)	(mg/l)	5	NA	NA	NA	NA
Lead	(mg/l)	0.0075	0.00530	<0.002	<0.0020	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	NA	NA	NA	NA
Mercury	(mg/l)	0.002	<0.0002	<0.0002	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	NA	NA	NA	NA
Nickel	(mg/l)	0.1	0.0178	0.0128	0.0087J	0.0107
						0.0149

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
	SAMPLE ID	HMW-25	HMW-25/040422	HMW-25/040707	DUP-001/040707	HMW-25/041019
	DATE	COMPARISON	12/16/2003	04/22/2004	07/07/2004	07/07/2004
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1
Nickel (Dissolved)	(mg/l)	0.1	NA	NA	NA	NA
Selenium (Dissolved)	(mg/l)	0.05	<0.006	<0.006	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	NA	NA	NA	NA
Silver (Dissolved)	(mg/l)	0.05	<0.010	<0.010	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	NA	NA	NA	NA
Vanadium (Dissolved)	(mg/l)	0.049	0.00930	<0.010	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	NA	NA	NA	NA
Zinc (Dissolved)	(mg/l)	5	0.210	0.241	0.0838	0.0832
Zinc (Dissolved)	(mg/l)	5	NA	NA	NA	NA

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
			DATE	COMPARISON	01/21/2005	01/21/2005	04/14/2005
	RESULT TYPE	VALUE	Primary	Duplicate 1	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0015J	<0.0030	<0.0030	<0.0030	0.0009J
Arsenic (Dissolved)	(mg/l)	0.05	0.0007J	<0.0030	<0.0030	0.0019J	<0.0030
Barium	(mg/l)	2	0.248	0.254	0.235	0.251	0.239
Barium (Dissolved)	(mg/l)	2	0.229	0.233	0.230	0.250	0.235
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	0.0007J	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0007J	0.0009J	0.0007J	<0.0020	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	0.0005J	<0.0020	0.0006J	<0.0020	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Iron	(mg/l)	5	NA	NA	NA	NA	0.0868
Iron (Dissolved)	(mg/l)	5	NA	NA	NA	NA	0.0333
Lead	(mg/l)	0.0075	<0.0020	<0.0020	0.0005J	<0.0020	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	0.0010J	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0131	0.0106	0.0112	0.0142	0.0111

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
	DATE		HMW-25/050121	Dup-001/050121	HMW-25/050414	HMW-25/050712	HMW-25/051006
	RESULT TYPE		COMPARISON	01/21/2005	01/21/2005	04/14/2005	07/12/2005
Nickel (Dissolved)	(mg/l)	0.1	0.0134	0.0105	0.0109	0.0146	0.0098J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0040J	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	0.0050J	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.02013	0.0141	0.0022J	0.0046J	<0.0100
Zinc (Dissolved)	(mg/l)	5	0.0271	0.0117	0.0040J	0.0062J	<0.0100

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
	SAMPLE ID		HMW-25/060113	HMW-25/060407	HMW-25/060710	HMW-25/061011	HMW-25/070115
	DATE		01/13/2006	04/07/2006	07/10/2006	10/11/2006	01/15/2007
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	0.0030J	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Barium	(mg/l)	2	0.251	0.248	0.292	0.268	0.280
Barium (Dissolved)	(mg/l)	2	0.222	0.229	0.271	0.248	0.274
Beryllium	(mg/l)	0.004	0.0008J	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0014J	<0.0020	0.0019J	0.0003J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	0.0013J	<0.0020	<0.0020
Chromium	(mg/l)	0.1	<0.0100	0.0041J	0.0048J	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0049J	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	0.0058J	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	0.0042J	<0.0100	0.0044J	0.0023J	<0.0100
Iron	(mg/l)	5	0.106	0.528	0.0211	0.0398	<0.0200
Iron (Dissolved)	(mg/l)	5	0.0264	0.0291	<0.0200	<0.0200	<0.0200
Lead	(mg/l)	0.0075	<0.0020	<0.0020	0.0004J	<0.0020	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0063J	0.0121	0.0172	0.0056J	0.0095J

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
	SAMPLE ID		HMW-25/060113	HMW-25/060407	HMW-25/060710	HMW-25/061011	HMW-25/070115
	DATE		01/13/2006	04/07/2006	07/10/2006	10/11/2006	01/15/2007
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0094J	0.0117	0.0158	0.0079J	0.0091J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	0.0082J	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0048J	0.0060J	0.0038J	<0.0100	<0.0100
Zinc (Dissolved)	(mg/l)	5	0.0078J	0.0055J	<0.0100	<0.0100	0.0045J

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-25	HMW-26	HMW-26	HMW-26	HMW-26
	DATE		DUP-001/070115	HWM-26	HMW-26/040422	HMW-26/040707	HMW-26/041020
	RESULT TYPE	VALUE	01/15/2007	12/16/2003	04/22/2004	07/07/2004	10/20/2004
Antimony	(mg/l)	0.006	<0.0050	<0.005	<0.005	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	0.0020J	NA	NA	NA	NA
Arsenic	(mg/l)	0.05	<0.0030	0.00449	0.00654	0.0012J	0.0020J
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	NA	NA	NA	NA
Barium	(mg/l)	2	0.285	0.362	0.242	0.222	0.206
Barium (Dissolved)	(mg/l)	2	0.277	NA	NA	NA	NA
Beryllium	(mg/l)	0.004	<0.0010	0.000300	<0.001	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	NA	NA	NA	NA
Cadmium	(mg/l)	0.005	<0.0020	<0.002	<0.002	0.0003J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	NA	NA	NA	NA
Chromium	(mg/l)	0.1	<0.0100	0.0311	0.00410J	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	NA	NA	NA	NA
Cobalt	(mg/l)	1	<0.0100	0.00770J	<0.010	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	NA	NA	NA	NA
Iron	(mg/l)	5	<0.0200	NA	NA	NA	NA
Iron (Dissolved)	(mg/l)	5	<0.0200	NA	NA	NA	NA
Lead	(mg/l)	0.0075	<0.0020	0.0159	0.00331	<0.0020	0.0008J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	NA	NA	NA	NA
Mercury	(mg/l)	0.002	<0.00020	<0.0002	<0.0002	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	NA	NA	NA	NA
Nickel	(mg/l)	0.1	0.0095J	0.0219	<0.010	<0.0100	<0.0100

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-26	HMW-26	HMW-26	HMW-26
	SAMPLE ID		DUP-001/070115	HWM-26	HMW-26/040422	HMW-26/040707	HMW-26/041020
	DATE		01/15/2007	12/16/2003	04/22/2004	07/07/2004	10/20/2004
	RESULT TYPE	VALUE	Duplicate 1	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0093J	NA	NA	NA	NA
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	NA	NA	NA	NA
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	NA	NA	NA	NA
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	NA	NA	NA	NA
Zinc	(mg/l)	5	0.0025J	0.276	0.118	0.0258	0.105
Zinc (Dissolved)	(mg/l)	5	0.0028J	NA	NA	NA	NA

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	SAMPLE ID		Dup-001/041020	HMW-26/050121	HMW-26/050414	DUP002/050414	HMW-26/050712
	DATE		10/20/2004	01/21/2005	04/14/2005	04/14/2005	07/12/2005
	RESULT TYPE		Duplicate 1	Primary	Primary	Duplicate 1	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	NA	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0017J	0.0016J	0.0031	0.0033	0.0030J
Arsenic (Dissolved)	(mg/l)	0.05	NA	0.0018J	0.0019J	0.0020J	0.0022J
Barium	(mg/l)	2	0.202	0.177	0.160	0.159	0.179
Barium (Dissolved)	(mg/l)	2	NA	0.159	0.153	0.154	0.185
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	0.0004J
Beryllium (Dissolved)	(mg/l)	0.004	NA	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0003J	0.0005J	<0.0020	<0.0020	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	NA	0.0003J	0.0003J	<0.0020	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	NA	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	NA	<0.0100	<0.0100	<0.0100	<0.0100
Iron	(mg/l)	5	NA	NA	NA	NA	NA
Iron (Dissolved)	(mg/l)	5	NA	NA	NA	NA	NA
Lead	(mg/l)	0.0075	0.0006J	<0.0020	0.0025	<0.0020	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	NA	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	NA	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	SAMPLE ID		Dup-001/041020	HMW-26/050121	HMW-26/050414	DUP002/050414	HMW-26/050712
	DATE		10/20/2004	01/21/2005	04/14/2005	04/14/2005	07/12/2005
	RESULT TYPE		Duplicate 1	Primary	Primary	Duplicate 1	Primary
Nickel (Dissolved)	(mg/l)	0.1	NA	<0.0100	<0.0100	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	NA	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	NA	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	NA	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.129	<0.0100	0.0099J	<0.0100	0.0129
Zinc (Dissolved)	(mg/l)	5	NA	<0.0100	<0.0100	<0.0100	0.0053J

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	DATE		COMPARISON	10/06/2005	01/12/2006	04/07/2006	07/10/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	NA	<0.0050
Antimony(Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	NA
Arsenic	(mg/l)	0.05	0.0067	0.0069	0.0052	NA	0.0022J
Arsenic(Dissolved)	(mg/l)	0.05	0.0056	0.0059	0.0037	0.0036	NA
Barium	(mg/l)	2	0.184	0.197	0.186	NA	0.191
Barium(Dissolved)	(mg/l)	2	0.178	0.160	0.169	0.173	NA
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	0.0003J	NA	<0.0010
Beryllium(Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	0.0003J	<0.0010	NA
Cadmium	(mg/l)	0.005	<0.0020	0.0010J	0.0012J	NA	0.0017J
Cadmium(Dissolved)	(mg/l)	0.005	<0.0020	0.0018J	0.0012J	0.0010J	NA
Chromium	(mg/l)	0.1	<0.0100	<0.0100	0.0055J	NA	<0.0100
Chromium(Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	0.0042J	0.0054J	NA
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	NA	<0.0100
Cobalt(Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0066J	NA
Iron	(mg/l)	5	24.7	26.2	21.2S	NA	23.3S
Iron(Dissolved)	(mg/l)	5	24.4	25.1	18.8S	20.8	NA
Lead	(mg/l)	0.0075	<0.0020	0.0030	0.0016J	NA	0.0006J
Lead(Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	NA
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	NA	<0.00020
Mercury(Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	NA
Nickel	(mg/l)	0.1	<0.0100	<0.0100	0.0049J	NA	0.0064J

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	SAMPLE ID		HMW-26/051006	HMW-26/060112	HMW-26/060407	HMW-26/060710	HMW-26/060711
	DATE		10/06/2005	01/12/2006	04/07/2006	07/10/2006	07/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	0.0052J	0.0134	NA
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	NA	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	NA
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	NA	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	NA
Vanadium	(mg/l)	0.049	<0.0100	0.0050J	0.0047J	NA	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	0.0080J	0.0033J	<0.0100	NA
Zinc	(mg/l)	5	<0.0100	0.129	0.0065J	NA	0.0098J
Zinc (Dissolved)	(mg/l)	5	<0.0100	0.0039J	0.0021J	0.0025J	NA

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-26	HMW-26	HMW-26	HMW-27	HMW-27
	SAMPLE ID		HMW-26/061011	DUP-001/061011	HMW-26/070115	HMW-27	HMW-27/040422
	DATE		10/11/2006	10/11/2006	01/15/2007	12/16/2003	04/22/2004
	RESULT TYPE	VALUE	Primary	Duplicate 1	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.005	<0.005
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	NA	NA
Arsenic	(mg/l)	0.05	0.0037	0.0048	0.0044	<0.003	0.00185J
Arsenic (Dissolved)	(mg/l)	0.05	0.0039	0.0046	0.0025J	NA	NA
Barium	(mg/l)	2	0.167	0.168	0.171	0.175	0.189
Barium (Dissolved)	(mg/l)	2	0.155	0.152	0.163	NA	NA
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.001	<0.001
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	NA	NA
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	0.0005J	0.000300	<0.002
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	NA	NA
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.00910J	<0.010
Chromium (Dissolved)	(mg/l)	0.1	0.0061J	0.0059J	<0.0100	NA	NA
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.00470J	0.00890J
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	0.0025J	NA	NA
Iron	(mg/l)	5	22.1	21.3S	25.3	NA	NA
Iron (Dissolved)	(mg/l)	5	21.8	21.5	24.4	NA	NA
Lead	(mg/l)	0.0075	0.0007J	<0.0020	<0.0020	0.000792	0.00171J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	0.0008J	NA	NA
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.0002	<0.0002
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	NA	NA
Nickel	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0112	0.0175

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-26	HMW-26	HMW-26	HMW-27	HMW-27	
	SAMPLE ID	HMW-26/061011	DUP-001/061011	HMW-26/070115	HMW-27	HMW-27/040422	
	DATE	10/11/2006	10/11/2006	01/15/2007	12/16/2003	04/22/2004	
	RESULT TYPE	Primary	Duplicate 1	Primary	Primary	Primary	
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	NA	NA
Selenium	(mg/l)	0.05	<0.0060	<0.0060S	<0.0060	<0.006	<0.006
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060S	<0.0060	NA	NA
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.010	<0.010
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	NA	NA
Vanadium	(mg/l)	0.049	0.0092J	<0.0100	0.0032J	<0.010	<0.010
Vanadium (Dissolved)	(mg/l)	0.049	0.0046J	0.0117	<0.0100	NA	NA
Zinc	(mg/l)	5	<0.0100	<0.0100	0.0033J	0.213	0.0800
Zinc (Dissolved)	(mg/l)	5	<0.0100	<0.0100	0.0023J	NA	NA

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-27	HMW-27	HMW-27	HMW-27	HMW-27
	SAMPLE ID	DUP-01/040422	HMW-27/040707	HMW-27/041020	HMW-27/050121	HMW-27/050419
	DATE	COMPARISON	04/22/2004	07/07/2004	10/20/2004	01/21/2005
	RESULT TYPE	VALUE	Duplicate 1	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.005	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	NA	NA	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.00118J	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	NA	NA	<0.0030	<0.0030
Barium	(mg/l)	2	0.198	0.182	0.119	0.142
Barium (Dissolved)	(mg/l)	2	NA	NA	0.130	0.111
Beryllium	(mg/l)	0.004	<0.001	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	NA	NA	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.000700	<0.0020	0.0006J	0.0005J
Cadmium (Dissolved)	(mg/l)	0.005	NA	NA	<0.0020	0.0006J
Chromium	(mg/l)	0.1	<0.010	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	NA	NA	<0.0100	<0.0100
Cobalt	(mg/l)	1	0.00840J	0.0048J	0.0095J	0.0056J
Cobalt (Dissolved)	(mg/l)	1	NA	NA	0.0046J	0.0059J
Iron	(mg/l)	5	NA	NA	NA	NA
Iron (Dissolved)	(mg/l)	5	NA	NA	NA	NA
Lead	(mg/l)	0.0075	0.00256	<0.0020	0.0019J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	NA	NA	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.0002	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	NA	NA	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0175	0.0092J	0.0220	0.0093J

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-27	HMW-27	HMW-27	HMW-27	HMW-27
	SAMPLE ID		DUP-01/040422	HMW-27/040707	HMW-27/041020	HMW-27/050121	HMW-27/050419
	DATE		04/22/2004	07/07/2004	10/20/2004	01/21/2005	04/19/2005
	RESULT TYPE	VALUE	Duplicate 1	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	NA	NA	NA	0.0094J	0.0181
Selenium	(mg/l)	0.05	<0.006	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	NA	NA	NA	<0.0060	<0.0060
Silver	(mg/l)	0.05	0.00330J	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	NA	NA	NA	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.010	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	NA	NA	NA	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0910	0.0431	0.170	0.0075J	<0.0100
Zinc (Dissolved)	(mg/l)	5	NA	NA	NA	0.0066J	<0.0100

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-27	HMW-27	HMW-27	HMW-27	HMW-27
	DATE		HMW-27/050712	HMW-27/051007	HMW-27/060112	HMW-27/060406	HMW-27/060710
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	0.0015J	<0.0030
Barium	(mg/l)	2	0.0856	0.0982	0.121	0.161	0.108
Barium (Dissolved)	(mg/l)	2	0.0854	0.0936	0.0993	0.155	0.0945
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	0.0003J	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	<0.0020	0.0018J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	0.0005J	<0.0020	0.0010J
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0041J	0.0049J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	0.0052J
Cobalt	(mg/l)	1	0.0063J	0.0083J	0.0053J	0.0087J	0.0145
Cobalt (Dissolved)	(mg/l)	1	0.0070J	0.0069J	0.0057J	0.0062J	0.016
Iron	(mg/l)	5	NA	0.167	0.254	2.71	1.11
Iron (Dissolved)	(mg/l)	5	NA	0.175	0.151	2.53	0.181
Lead	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	0.0017J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0195	0.0210	0.0136	0.0163	0.0247

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-27	HMW-27	HMW-27	HMW-27	HMW-27
	DATE		HMW-27/050712	HMW-27/051007	HMW-27/060112	HMW-27/060406	HMW-27/060710
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0161	0.0204	0.0118	0.0158	0.0209
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0083
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	0.0080
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	0.0051J
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	0.0049J
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	0.0060J	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	0.0035J	0.0040J	0.0055J	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0023J	0.0023J	<0.0100	0.0058J	0.0297
Zinc (Dissolved)	(mg/l)	5	0.0050J	<0.0100	0.0025J	0.0054J	0.0050J

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-27	HMW-27	HMW-28	HMW-28	HMW-28
	DATE		HMW-27/061012	HMW-27/070115	HMW-28	HMW-28/040422	HMW-28/040707
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.005	<0.005	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	NA	NA	NA
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	0.00142J	0.00898	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	NA	NA	NA
Barium	(mg/l)	2	0.101	0.166	0.107	0.273	0.115
Barium (Dissolved)	(mg/l)	2	0.102	0.158	NA	NA	NA
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.001	<0.001	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	NA	NA	NA
Cadmium	(mg/l)	0.005	0.0005J	<0.0020	<0.002	0.00110J	0.0011J
Cadmium (Dissolved)	(mg/l)	0.005	0.0007J	<0.0020	NA	NA	NA
Chromium	(mg/l)	0.1	<0.0100	<0.0100	0.00590J	<0.010	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	NA	NA	NA
Cobalt	(mg/l)	1	0.0090J	0.0050J	0.00920J	0.0145	0.0068J
Cobalt (Dissolved)	(mg/l)	1	0.0054J	0.0072J	NA	NA	NA
Iron	(mg/l)	5	0.617	3.07	NA	NA	NA
Iron (Dissolved)	(mg/l)	5	0.167	2.58	NA	NA	NA
Lead	(mg/l)	0.0075	<0.0020	<0.0020	0.00238	0.00759	0.0028
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	NA	NA	NA
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.0002	<0.0002	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	NA	NA	NA
Nickel	(mg/l)	0.1	0.0125	0.0096J	0.0221	0.0325	0.0218

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-27	HMW-27	HMW-28	HMW-28	HMW-28
	SAMPLE ID		HMW-27/061012	HMW-27/070115	HMW-28	HMW-28/040422	HMW-28/040707
	DATE		10/12/2006	01/15/2007	12/16/2003	04/22/2004	07/07/2004
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0119	0.0105	NA	NA	NA
Selenium	(mg/l)	0.05	<0.0060S	<0.0060	<0.006	0.0109	0.0207
Selenium (Dissolved)	(mg/l)	0.05	<0.0060S	<0.0060	NA	NA	NA
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.010	<0.010	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	NA	NA	NA
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.010	<0.010	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	0.0059J	<0.0100	NA	NA	NA
Zinc	(mg/l)	5	0.0132	0.0055J	0.0827	0.0840	0.0741
Zinc (Dissolved)	(mg/l)	5	<0.0100	0.0058J	NA	NA	NA

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28
	SAMPLE ID	HMW-28/041020	HMW-28/050121	HMW-28/050419	HMW-28/050712	HMW-28/051007
	DATE	10/20/2004	01/21/2005	04/19/2005	07/12/2005	10/07/2005
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	NA	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0044	<0.0030	<0.0030	0.0009J
Arsenic (Dissolved)	(mg/l)	0.05	NA	<0.0030	<0.0030	<0.0030
Barium	(mg/l)	2	0.173	0.0848	0.0925	0.0976
Barium (Dissolved)	(mg/l)	2	NA	0.0764	0.0900	0.0946
Beryllium	(mg/l)	0.004	<0.0010	0.0003J	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	NA	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0004J	0.0003J	0.0005J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	NA	0.0008J	0.0005J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	NA	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	0.0193	0.0054J	0.0078J	0.0066J
Cobalt (Dissolved)	(mg/l)	1	NA	0.0059J	0.0074J	0.0052J
Iron	(mg/l)	5	NA	NA	NA	NA
Iron (Dissolved)	(mg/l)	5	NA	NA	NA	NA
Lead	(mg/l)	0.0075	0.0048	<0.0020	<0.0020	0.0008J
Lead (Dissolved)	(mg/l)	0.0075	NA	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	NA	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0268	0.0186	0.0213	0.0213

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28
	SAMPLE ID		HMW-28/041020	HMW-28/050121	HMW-28/050419	HMW-28/050712	HMW-28/051007
	DATE		10/20/2004	01/21/2005	04/19/2005	07/12/2005	10/07/2005
	RESULT TYPE		Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	NA	0.0180	0.0191	0.0156	0.0194
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	0.0074	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	NA	<0.0060	<0.0060	0.0107	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	NA	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	NA	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.129	0.0080J	0.0051J	0.0085J	0.0061J
Zinc (Dissolved)	(mg/l)	5	NA	0.0058J	<0.0100	0.0040J	0.0027J

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28
	SAMPLE ID	HMW-28/060113	HMW-28/060406	HMW-28/060710	Dup-001/060710	HMW-28/061012
	DATE	COMPARISON	01/13/2006	04/06/2006	07/10/2006	07/10/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030
Barium	(mg/l)	2	0.0907	0.0912	0.0924	0.0922
Barium (Dissolved)	(mg/l)	2	0.0772	0.0877	0.0837	0.0828
Beryllium	(mg/l)	0.004	0.0003J	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0007J	<0.0020	0.0012J	0.0013J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	0.0004J	0.0007J	0.0013J
Chromium	(mg/l)	0.1	<0.0100	<0.0100	0.0043J	0.0047J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	0.0040J	0.0041J
Cobalt	(mg/l)	1	0.0091J	0.0113	0.0151	0.0133
Cobalt (Dissolved)	(mg/l)	1	0.0095J	0.0087J	0.0149	0.0126
Iron	(mg/l)	5	0.0070J	0.0562	0.019J	0.016J
Iron (Dissolved)	(mg/l)	5	<0.0200	<0.0200	<0.0200	<0.0200
Lead	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	0.0005J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0179	0.0222	0.0247	0.0243

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28
	SAMPLE ID		HMW-28/060113	HMW-28/060406	HMW-28/060710	Dup-001/060710	HMW-28/061012
	DATE		01/13/2006	04/06/2006	07/10/2006	07/10/2006	10/12/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0129	0.0211	0.0234	0.0222	0.0145
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0270	0.0251	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	0.0171	0.0210	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	0.0035J	0.0048J	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0051J	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	0.0088J
Zinc	(mg/l)	5	0.0052J	0.0063J	0.0063J	0.0062J	0.0086J
Zinc (Dissolved)	(mg/l)	5	0.0028J	0.0046J	0.0063J	0.0072J	<0.0100

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-28	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID		HMW-28/070115	HMW-29	HMW-29/040422	HMW-29/040707	HMW-29/041020
	DATE		01/15/2007	12/17/2003	04/22/2004	07/07/2004	10/20/2004
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.005	<0.005	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	NA	NA	NA	NA
Arsenic	(mg/l)	0.05	<0.0030	0.00641	0.00662	0.0012J	0.0035
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	NA	NA	NA	NA
Barium	(mg/l)	2	0.0961	0.139	0.268	0.160	0.221
Barium (Dissolved)	(mg/l)	2	0.0941	NA	NA	NA	NA
Beryllium	(mg/l)	0.004	<0.0010	<0.001	<0.001	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	NA	NA	NA	NA
Cadmium	(mg/l)	0.005	0.0004J	0.000700	0.000900	0.0005J	0.0007J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	NA	NA	NA	NA
Chromium	(mg/l)	0.1	<0.0100	<0.010	<0.010	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	NA	NA	NA	NA
Cobalt	(mg/l)	1	0.0111	<0.010	0.00600J	0.0025J	0.0052J
Cobalt (Dissolved)	(mg/l)	1	<0.0115	NA	NA	NA	NA
Iron	(mg/l)	5	0.0496	NA	NA	NA	NA
Iron (Dissolved)	(mg/l)	5	<0.0200	NA	NA	NA	NA
Lead	(mg/l)	0.0075	<0.0020	0.00160J	0.0238	0.0020J	0.0134
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	NA	NA	NA	NA
Mercury	(mg/l)	0.002	<0.00020	<0.0002	<0.0002	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	NA	NA	NA	NA
Nickel	(mg/l)	0.1	0.0204	0.00380J	0.0232	0.0073J	0.0152

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE		HMW-28	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID		HMW-28/070115	HMW-29	HMW-29/040422	HMW-29/040707	HMW-29/041020
	DATE	COMPARISON	01/15/2007	12/17/2003	04/22/2004	07/07/2004	10/20/2004
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0210	NA	NA	NA	NA
Selenium	(mg/l)	0.05	<0.0060	<0.006	<0.006	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	NA	NA	NA	NA
Silver	(mg/l)	0.05	<0.0100	0.00650J	<0.010	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	NA	NA	NA	NA
Vanadium	(mg/l)	0.049	<0.0100	<0.010	<0.010	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	NA	NA	NA	NA
Zinc	(mg/l)	5	0.0077J	0.0258	0.136	0.0402	0.0345
Zinc (Dissolved)	(mg/l)	5	0.0068J	NA	NA	NA	NA

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	DATE	COMPARISON	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
					HMW-29/052101	HMW-29/050419	HMW-29/050713	DUP-001/050713	HMW-29/051007
	RESULT TYPE	VALUE		Primary	Primary	Primary	Duplicate 1	Primary	
Antimony	(mg/l)	0.006		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	<0.006		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05		0.0018J	0.0019J	0.0012J	0.0014J	0.0023J	
Arsenic (Dissolved)	(mg/l)	<0.05		0.0014J	<0.0030	0.0011J	0.0014J	0.0011J	
Barium	(mg/l)	2		0.146	0.120	0.139	0.154	0.139	
Barium (Dissolved)	(mg/l)	2		0.128	0.115	0.118	0.119	0.128	
Beryllium	(mg/l)	0.004		0.0005J	<0.0010	<0.0010	<0.0010	0.0003J	
Beryllium (Dissolved)	(mg/l)	0.004		0.0005J	<0.0010	0.0004J	0.0004J	<0.0010	
Cadmium	(mg/l)	0.005		0.0003J	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005		<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Chromium	(mg/l)	0.1		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1		0.0048J	0.0023J	0.0051J	0.0048J	<0.0100	
Iron	(mg/l)	5		NA	NA	NA	NA	8.11	
Iron (Dissolved)	(mg/l)	5		NA	NA	3.78	4.38	6.21	
Lead	(mg/l)	0.0075		0.0028	<0.0020	0.0019J	0.0028	0.0006J	
Lead (Dissolved)	(mg/l)	0.0075		<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002		<0.00020	<0.00020	0.00010J	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1		0.0098J	0.0066J	0.0109	0.0095J	<0.0100	

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID		HMW-29/052101	HMW-29/050419	HMW-29/050713	DUP-001/050713	HMW-29/051007
	DATE		01/21/2005	04/19/2005	07/13/2005	07/13/2005	10/07/2005
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0048J	0.0052J	0.0096J	0.0085J	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	0.0149	0.0094J	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0523	0.0223	0.0170	0.0177	<0.0100
Zinc (Dissolved)	(mg/l)	5	0.0325	0.0078J	0.0078J	0.0068J	<0.0100

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID	DUP-001/051007	HMW-29/060113	DUP001/060113	HMW-29/060406	DUP-001/060406
	DATE	10/07/2005	01/13/2006	01/13/2006	04/06/2006	04/06/2006
	RESULT TYPE	VALUE	Duplicate 1	Primary	Duplicate 1	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050S
Arsenic	(mg/l)	0.05	0.0010J	0.0017J	0.0013J	0.0020J
Arsenic (Dissolved)	(mg/l)	0.05	0.0013J	0.0011J	0.0014J	0.0019J
Barium	(mg/l)	2	0.125	0.148	0.137	0.133
Barium (Dissolved)	(mg/l)	2	0.126	0.125	0.120	0.120
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	0.0014J	0.0008J	0.0016J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	0.0005J	0.0003J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0071J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	0.0029J	<0.0100	0.0044J
Iron	(mg/l)	5	6.81	8.35	8.13	10.2
Iron (Dissolved)	(mg/l)	5	7.12	8.63	8.63	8.48
Lead	(mg/l)	0.0075	0.0008J	<0.0020	<0.0020	0.0025
Lead (Dissolved)	(mg/l)	0.0075	0.0005J	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	<0.0100	<0.0100	0.0034J	0.0067J

See Notes at End of Table

Table 5
 Summary of Groundwater Analytical Results for Sentinel Wells
 Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID		DUP-001/051007	HMW-29/060113	DUP001/060113	HMW-29/060406	DUP-001/060406
	DATE		10/07/2005	01/13/2006	01/13/2006	04/06/2006	04/06/2006
	RESULT TYPE		Duplicate 1	Primary	Duplicate 1	Primary	Duplicate 1
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	0.0048J	0.0075J	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	<0.0100	<0.0100	<0.0100	0.0064J	0.0027J
Zinc (Dissolved)	(mg/l)	5	<0.0100	0.0024J	0.0033J	0.0034J	<0.0100

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-29	HMW-29
	SAMPLE ID	HMW-29/060710	HMW-29/061012	HMW-29/070116
	DATE	07/10/2006	10/12/2006	01/16/2007
	RESULT TYPE	COMPARISON	Primary	Primary
	VALUE			
Antimony	(mg/l)	0.006	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	0.0030J	<0.0050
Arsenic	(mg/l)	0.05	0.0026J	0.0018J
Arsenic (Dissolved)	(mg/l)	0.05	0.0015J	0.0017J
Barium	(mg/l)	2	0.147	0.132
Barium (Dissolved)	(mg/l)	2	0.122	0.132
Beryllium	(mg/l)	0.004	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0013J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	0.0013J	<0.0020
Chromium	(mg/l)	0.1	0.0057J	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	0.0054J	<0.0100
Cobalt	(mg/l)	1	0.0060J	<0.0100
Cobalt (Dissolved)	(mg/l)	1	0.0073J	<0.0100
Iron	(mg/l)	5	9.62	8.57
Iron (Dissolved)	(mg/l)	5	6.03	7.01
Lead	(mg/l)	0.0075	0.0013J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0115	<0.0100
				0.0039J

See Notes at End of Table

Table 5
Summary of Groundwater Analytical Results for Sentinel Wells
Metals (Total and Dissolved)

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-29	HMW-29	HMW-29
	SAMPLE ID		HMW-29/060710	HMW-29/061012	HMW-29/070116
	DATE		07/10/2006	10/12/2006	01/16/2007
	RESULT TYPE	VALUE	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0079J	<0.0100	0.0041J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	0.0043J	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	0.0040J	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	0.0085J	0.0074J
Zinc	(mg/l)	5	0.0118	<0.0100	0.0093J
Zinc (Dissolved)	(mg/l)	5	0.0047J	0.0021J	0.0063J

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25	
	SAMPLE ID		HMW-25	HMW-25/040422	HMW-25/040707	DUP-001/040707	HMW-25/041019	
	DATE	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1	Primary
Alkalinity (as CaCO ₃)	(mg/l)		NA	NA	NA	NA	NA	496
Ammonia (as N)	(mg/l)		NA	NA	NA	NA	NA	NA
Chloride	(mg/l)	200	NA	NA	NA	NA	NA	96
COD	(mg/l)		NA	NA	NA	NA	NA	16
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.007	<0.007	<0.050
Hardness (as CaCO ₃)	(mg/l)		NA	NA	NA	NA	NA	540
Nitrate (as N)	(mg/l)	10	NA	NA	NA	NA	NA	NA
Nitrate Plus Nitrite (as N)	(mg/l)		NA	NA	NA	NA	NA	NA
Nitrite (as N)	(mg/l)		NA	NA	NA	NA	NA	NA
Phosphorus	(mg/l)		NA	NA	NA	NA	NA	NA
Phosphorus (Dissolved)	(mg/l)		NA	NA	NA	NA	NA	NA
Sulfate	(mg/l)	400	NA	NA	NA	NA	NA	57
Sulfide	(mg/l)		NA	NA	NA	NA	NA	0.02J
Total dissolved solids (TDS)	(mg/l)		NA	NA	NA	NA	NA	714
Total Organic Carbon	(mg/l)		NA	NA	NA	NA	NA	NA
Total suspended solids	(mg/l)		NA	NA	NA	NA	NA	9

See Notes at End of Table

Table 6
 Summary of Groundwater Analytical Results for Sentinel Wells
 General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
	SAMPLE ID		HMW-25/050121	Dup-001/050121	HMW-25/050414	HMW-25/051006	HMW-25/060113
	DATE		01/21/2005	01/21/2005	04/14/2005	10/06/2005	01/13/2006
	RESULT TYPE		Primary	Duplicate 1	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)		476	480	430	458	476
Ammonia (as N)	(mg/l)		NA	NA	NA	<0.10	0.04J
Chloride	(mg/l)	200	69	66	100	57	50
COD	(mg/l)		<20	<20	26	15J	10J
Cyanide	(mg/l)	0.2	<0.050	<0.050	<0.050	<0.050	<0.007
Hardness (as CaCO ₃)	(mg/l)		490	492	496	400	410K
Nitrate (as N)	(mg/l)	10	NA	NA	NA	<0.01	0.017
Nitrate (Plus Nitrite) (as N)	(mg/l)		NA	NA	NA	<0.01	0.017
Nitrite (as N)	(mg/l)		NA	NA	NA	<0.0100	<0.010
Phosphorus	(mg/l)		NA	NA	NA	0.052	0.016J
Phosphorus (Dissolved)	(mg/l)		NA	NA	NA	<0.020	0.013J
Sulfate	(mg/l)	400	66	69	41	42	<40
Sulfide	(mg/l)		<0.05	<0.05	<0.05	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		650	654	662	542H	604
Total Organic Carbon	(mg/l)		NA	NA	NA	2.1	2.3
Total suspended solids	(mg/l)		13	10	6	<6	8

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-25	HMW-25	HMW-25	HMW-25	HMW-25
	DATE		COMPARISON	HMW-25/060407	HMW-25/060710	HMW-25/061011	HMW-25/070115
	RESULT TYPE	VALUE	04/07/2006	07/10/2006	10/11/2006	01/15/2007	01/15/2007
Alkalinity (as CaCO ₃)	(mg/l)		460	472	452	476	472
Ammonia (as N)	(mg/l)		<0.10	<0.10S	<0.10	<0.10	<0.10
Chloride	(mg/l)	200	62	98	85	78	77
COD	(mg/l)		<20	91	<20	123	101
Cyanide	(mg/l)	0.2	<0.050	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		420	530	500	510	500
Nitrate (as N)	(mg/l)	10	0.010J	0.118	0.298	0.171	0.138
Nitrate Plus Nitrite (as N)	(mg/l)		0.010J	0.118	0.303	0.176	0.143
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)		0.023S	<0.020	0.019J	<0.020	0.022
Phosphorus (Dissolved)	(mg/l)		<0.020	<0.020	<0.020	<0.020	0.013J
Sulfate	(mg/l)	400	<40	50	50	66	62
Sulfide	(mg/l)		<0.05	<0.05	<0.05	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		658	684	608	680	690
Total Organic Carbon	(mg/l)		1.5	1.9	1.9	0.7J	0.7J
Total suspended solids	(mg/l)		9	26	<6	<6	<6

See Notes at End of Table

Table 6
 Summary of Groundwater Analytical Results for Sentinel Wells
 General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	SAMPLE ID		HWM-26	HMW-26/040422	HMW-26/040707	HMW-26/041020	Dup-001/041020
	DATE		12/16/2003	04/22/2004	07/07/2004	10/20/2004	10/20/2004
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)		NA	NA	NA	584	604
Ammonia (as N)	(mg/l)		NA	NA	NA	NA	NA
Chloride	(mg/l)	200	NA	NA	NA	92	100
COD	(mg/l)		NA	NA	NA	16	23
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.050	<0.050
Hardness (as CaCO ₃)	(mg/l)		NA	NA	NA	910	920
Nitrate (as N)	(mg/l)	10	NA	NA	NA	NA	NA
Nitrate Plus Nitrite (as N)	(mg/l)		NA	NA	NA	NA	NA
Nitrite (as N)	(mg/l)		NA	NA	NA	NA	NA
Phosphorus	(mg/l)		NA	NA	NA	NA	NA
Phosphorus (Dissolved)	(mg/l)		NA	NA	NA	NA	NA
Sulfate	(mg/l)	400	NA	NA	NA	301	341
Sulfide	(mg/l)		NA	NA	NA	0.02J	0.03J
Total dissolved solids (TDS)	(mg/l)		NA	NA	NA	1210	1230
Total Organic Carbon	(mg/l)		NA	NA	NA	NA	NA
Total suspended solids	(mg/l)		NA	NA	NA	47	67

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26	
	SAMPLE ID	HMW-26/050121	HMW-26/050414	DUP002/050414	HMW-26/051006	HMW-26/060112	
	DATE	COMPARISON	01/21/2005	04/14/2005	04/14/2005	10/06/2005	01/12/2006
	RESULT TYPE	VALUE	Primary	Primary	Duplicate 1	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	578	600	608	588	572	
Ammonia (as N)	(mg/l)		NA	NA	NA	0.35	0.30
Chloride	(mg/l)	200	93	75	75	140	134
COD	(mg/l)		121	20	133	33	25
Cyanide	(mg/l)	0.2	<0.050	<0.050	<0.050	<0.050	<0.007
Hardness (as CaCO ₃)	(mg/l)		990	850	870	700	780
Nitrate (as N)	(mg/l)	10	NA	NA	NA	0.02	0.016
Nitrate Plus Nitrite (as N)	(mg/l)		NA	NA	NA	0.02	0.026
Nitrite (as N)	(mg/l)		NA	NA	NA	<0.0100	0.010
Phosphorus	(mg/l)		NA	NA	NA	0.389	0.307
Phosphorus (Dissolved)	(mg/l)		NA	NA	NA	0.389	0.310
Sulfate	(mg/l)	400	298	224	243	151	132
Sulfide	(mg/l)		<0.05	<0.05	<0.05	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		1230	1080	1090	1070	1040
Total Organic Carbon	(mg/l)		NA	NA	NA	3.1	2.2
Total suspended solids	(mg/l)		58	47	39	40	21

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	SAMPLE ID		HMW-26/060407	HMW-26/060710	HMW-26/060711	HMW-26/061011	DUP-001/061011
	DATE		04/07/2006	07/10/2006	07/11/2006	10/11/2006	.10/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)		604	586	NA	598	600
Ammonia (as N)	(mg/l)		0.29	NA	0.21	0.28	0.27S
Chloride	(mg/l)	200	109S	84	NA	120	125
COD	(mg/l)		<20	NA	24	<20	<20
Cyanide	(mg/l)	0.2	<0.050	<0.007	NA	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		840	740	NA	780	760
Nitrate (as N)	(mg/l)	10	0.073	NA	0.012J	<0.050	<0.050
Nitrate Plus Nitrite (as N)	(mg/l)		0.073	NA	0.012J	<0.050	<0.050
Nitrite (as N)	(mg/l)		<0.010	<0.010	NA	<0.010	<0.010
Phosphorus	(mg/l)		0.342	NA	0.367	0.384	0.392
Phosphorus (Dissolved)	(mg/l)		0.325	0.345	NA	0.347	0.381
Sulfate	(mg/l)	400	135	148	NA	207	205
Sulfide	(mg/l)		0.02J	<0.05	NA	0.05J	0.02J
Total dissolved solids (TDS)	(mg/l)		1030	954	NA	1030	1060
Total Organic Carbon	(mg/l)		2.5	2.8	NA	3.1	3.0
Total suspended solids	(mg/l)		791	138	NA	346	36

See Notes at End of Table

Table 6
 Summary of Groundwater Analytical Results for Sentinel Wells
 General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-26	HMW-27	HMW-27	HMW-27	HMW-27
	SAMPLE ID	HMW-26/070115	HMW-27	HMW-27/040422	DUP-01/040422	HMW-27/040707
	DATE	COMPARISON	01/15/2007	12/16/2003	04/22/2004	04/22/2004
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)	602	NA	NA	NA	NA
Ammonia (as N)	(mg/l)	0.15	NA	NA	NA	NA
Chloride	(mg/l)	200	108S	NA	NA	NA
COD	(mg/l)		30	NA	NA	NA
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		790	NA	NA	NA
Nitrate (as N)	(mg/l)	10	<0.050	NA	NA	NA
Nitrate Plus Nitrite (as N)	(mg/l)		<0.050	NA	NA	NA
Nitrite (as N)	(mg/l)		<0.010	NA	NA	NA
Phosphorus	(mg/l)		0.383	NA	NA	NA
Phosphorus (Dissolved)	(mg/l)	0.356	NA	NA	NA	NA
Sulfate	(mg/l)	400	182	NA	NA	NA
Sulfide	(mg/l)		<0.05	NA	NA	NA
Total Dissolved Solids (TDS)	(mg/l)		1090	NA	NA	NA
Total Organic Carbon	(mg/l)	1.6	NA	NA	NA	NA
Total suspended solids	(mg/l)	39	NA	NA	NA	NA

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-27	HMW-27	HMW-27	HMW-27	HMW-27
	SAMPLE ID		HMW-27/041020	HMW-27/050121	HMW-27/050419	HMW-27/051007	HMW-27/060112
	DATE		10/20/2004	01/21/2005	04/19/2005	10/07/2005	01/12/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	628	602	618	648	642	
Ammonia (as N)	(mg/l)		NA	NA	NA	<0.10	0.04J
Chloride	(mg/l)	200	20	45	21	35	40
COD	(mg/l)		23	<20	163	33	14J
Cyanide	(mg/l)	0.2	<0.050	<0.050	<0.050	<0.050	0.006J
Hardness (as CaCO ₃)	(mg/l)		830	780	750	800	870
Nitrate (as N)	(mg/l)	10	NA	NA	NA	<0.01	0.011
Nitrate Plus Nitrite (as N)	(mg/l)		NA	NA	NA	<0.01	0.011
Nitrite (as N)	(mg/l)		NA	NA	NA	<0.0100	<0.010
Phosphorus	(mg/l)		NA	NA	NA	0.165	0.018J
Phosphorus (Dissolved)	(mg/l)		NA	NA	NA	<0.020	0.016J
Sulfate	(mg/l)	400	208	146	154	200	199
Sulfide	(mg/l)		0.03J	<0.05	<0.05	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		928	888	874	934	1020
Total Organic Carbon	(mg/l)		NA	NA	NA	4.8	4.4
Total suspended solids	(mg/l)		35	9	8	<6	3.6

See Notes at End of Table

Table 6
 Summary of Groundwater Analytical Results for Sentinel Wells
 General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-27	HMW-27	HMW-27	HMW-27	HMW-28	
	SAMPLE ID	HMW-27/060406	HMW-27/060710	HMW-27/061012	HMW-27/070115	HMW-28	
	DATE	COMPARISON	04/06/2006	07/10/2006	10/12/2006	01/15/2007	12/16/2003
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	640	614	592	614	NA	
Ammonia (as N)	(mg/l)	<0.10	<0.10	<0.10	<0.10	NA	
Chloride	(mg/l)	200	20S	48	44	24	NA
COD	(mg/l)		<20	48	<20	30	NA
Cyanide	(mg/l)	0.2	<0.050	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		760	870	870	840	NA
Nitrate (as N)	(mg/l)	10	<0.050	0.069	0.012J	0.052	NA
Nitrate Plus Nitrite (as N)	(mg/l)		<0.050	0.069	0.019J	0.055	NA
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010	NA
Phosphorus	(mg/l)		0.033	0.036	<0.020B	0.042	NA
Phosphorus (Dissolved)	(mg/l)		0.013J	<0.020	<0.020	0.025	NA
Sulfate	(mg/l)	400	178S	282	239	139	NA
Sulfide	(mg/l)		<0.05	<0.05	<0.05	<0.05	NA
Total dissolved solids (TDS)	(mg/l)		912	1070	1090	856	NA
Total Organic Carbon	(mg/l)		2.8	4.4	3.8	2.7	NA
Total suspended solids	(mg/l)		<6	<6	<6	<6	NA

See Notes at End of Table

Table 6
 Summary of Groundwater Analytical Results for Sentinel Wells
 General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28
	SAMPLE ID		HMW-28/040422	HMW-28/040707	HMW-28/041020	HMW-28/050121	HMW-28/050419
	DATE		04/22/2004	07/07/2004	10/20/2004	01/21/2005	04/19/2005
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)		NA	NA	548	540	538
Ammonia (as N)	(mg/l)		NA	NA	NA	NA	NA
Chloride	(mg/l)	200	NA	NA	36	35	45
COD	(mg/l)		NA	NA	123	120	111
Cyanide	(mg/l)	0.2	0.00400J	<0.007	<0.050	<0.050	<0.050
Hardness (as CaCO ₃)	(mg/l)		NA	NA	630	610	620
Nitrate (as N)	(mg/l)	10	NA	NA	NA	NA	NA
Nitrate Plus Nitrite (as N)	(mg/l)		NA	NA	NA	NA	NA
Nitrite (as N)	(mg/l)		NA	NA	NA	NA	NA
Phosphorus	(mg/l)		NA	NA	NA	NA	NA
Phosphorus (Dissolved)	(mg/l)		NA	NA	NA	NA	NA
Sulfate	(mg/l)	400	NA	NA	82	79	103
Sulfide	(mg/l)		NA	NA	<0.50	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		NA	NA	686	678	724
Total Organic Carbon	(mg/l)		NA	NA	NA	NA	NA
Total suspended solids	(mg/l)		NA	NA	48	6	8

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28
	SAMPLE ID		HMW-28/051007	HMW-28/060113	HMW-28/060406	HMW-28/060710	Dup-001/060710
	DATE		10/07/2005	01/13/2006	04/06/2006	07/10/2006	07/10/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)		526	552	544	558	544
Ammonia (as N)	(mg/l)		<0.10	<0.10	<0.10	<0.10	<0.10
Chloride	(mg/l)	200	28	35	33	24	24
COD	(mg/l)		41	23	<20	14	19
Cyanide	(mg/l)	0.2	<0.050	<0.007	<0.050	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		550	630	570	660	600
Nitrate (as N)	(mg/l)	10	0.01	0.081	0.306	1.24	1.32
Nitrate-Plus-Nitrite (as N)	(mg/l)		0.01	0.081	0.324	1.32	1.42
Nitrite (as N)	(mg/l)		<0.0100	<0.010	0.018	0.083	0.101
Phosphorus	(mg/l)		<0.020	0.016J	0.015J	<0.020	<0.020
Phosphorus (Dissolved)	(mg/l)		<0.020	0.016J	0.013J	0.013J	<0.020
Sulfate	(mg/l)	400	76	73	63	69	64
Sulfide	(mg/l)		<0.05	<0.05	<0.05	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		690	708	714	696	706
Total Organic Carbon	(mg/l)		3.6	4.5	3.6	4.1	4.1
Total suspended solids	(mg/l)		<6	<6	<6	<6	<6

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-28	HMW-28	HMW-29	HMW-29	HMW-29
	SAMPLE ID		HMW-28/061012	HMW-28/070115	HMW-29	HMW-29/040422	HMW-29/040707
DATE	RESULT TYPE	VALUE	10/12/2006	01/15/2007	12/17/2003	04/22/2004	07/07/2004
Alkalinity (as CaCO ₃)	(mg/l)		550	534	NA	NA	NA
Ammonia (as N)	(mg/l)		0.13	<0.10S	NA	NA	NA
Chloride	(mg/l)	200	29	30	NA	NA	NA
COD	(mg/l)		<20	21	NA	NA	NA
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	0.00280J	<0.007
Hardness (as CaCO ₃)	(mg/l)		630	610	NA	NA	NA
Nitrate (as N)	(mg/l)	10	1.43	2.18	NA	NA	NA
Nitrate/Plus Nitrite (as N)	(mg/l)		1.52	2.25	NA	NA	NA
Nitrite (as N)	(mg/l)		0.093	0.089	NA	NA	NA
Phosphorus	(mg/l)		<0.020	0.035	NA	NA	NA
Phosphorus (Dissolved)	(mg/l)		<0.022	0.012J	NA	NA	NA
Sulfate	(mg/l)	400	71	79	NA	NA	NA
Sulfide	(mg/l)		<0.05	<0.05	NA	NA	NA
Total dissolved solids (TDS)	(mg/l)		718	698	NA	NA	NA
Total Organic Carbon	(mg/l)		4.0	3.3	NA	NA	NA
Total suspended solids	(mg/l)		<6	<6	NA	NA	NA

See Notes at End of Table

Table 6
Summary of Groundwater Analytical Results for Sentinel Wells
General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County – ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29	
	SAMPLE ID	HMW-29/041020	HMW-29/052101	HMW-29/050419	HMW-29/051007	DUP-001/051007	
	DATE	COMPARISON	10/20/2004	01/21/2005	04/19/2005	10/07/2005	10/07/2005
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)	654	510	498	468	468	484
Ammonia (as N)	(mg/l)	NA	NA	NA	0.16	0.16	0.061
Chloride	(mg/l)	200	15	15	14	17	12
COD	(mg/l)	46	52	37	23	23	20
Cyanide	(mg/l)	0.2	<0.050	<0.050	<0.050	<0.050	<0.050
Hardness (as CaCO ₃)	(mg/l)	540	570	560	500	500	470
Nitrate (as N)	(mg/l)	10	NA	NA	NA	0.04	0.02
Nitrate-Plus Nitrite (as N)	(mg/l)	NA	NA	NA	0.04	0.04	0.02
Nitrite (as N)	(mg/l)	NA	NA	NA	<0.0100	<0.0100	<0.0100
Phosphorus	(mg/l)	NA	NA	NA	0.119	0.119	0.095
Phosphorus (Dissolved)	(mg/l)	NA	NA	NA	0.045	0.045	0.059
Sulfate	(mg/l)	400	84	99	108	91	74
Sulfide	(mg/l)	<1.2	<0.50	<0.05	<0.05	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)	622	550	664	614	614	612
Total Organic Carbon	(mg/l)	NA	NA	NA	2.0	2.0	1.4
Total suspended solids	(mg/l)	550	91	18	37	37	20

See Notes at End of Table

Table 6
 Summary of Groundwater Analytical Results for Sentinel Wells
 General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
	DATE		HMW-29/060113	DUP001/060113	HMW-29/060406	DUP-001/060406	HMW-29/060710
	RESULT TYPE	VALUE	01/13/2006	01/13/2006	04/06/2006	04/06/2006	07/10/2006
Alkalinity (as CaCO ₃)	(mg/l)		512	514	492	478	500
Ammonia (as N)	(mg/l)		<0.11	0.12	<0.07J	0.08J	<0.09J
Chloride	(mg/l)	200	31	29	17	17	5
COD	(mg/l)		<20	<20	<20	<20	<20
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.050	<0.050	<0.007
Hardness (as CaCO ₃)	(mg/l)		580	610	540	510	460
Nitrate (as N)	(mg/l)	10	0.017	0.044	<0.050	<0.050	<0.050
Nitrate/Plus Nitrite (as N)	(mg/l)		<0.017	0.044	<0.050	<0.050	<0.050
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)		0.088	0.092	0.110	0.103	0.173
Phosphorus (Dissolved)	(mg/l)		0.080	0.077	0.084	0.079	0.061
Sulfate	(mg/l)	400	114	122	72	74	47
Sulfide	(mg/l)		<0.05	<0.05	0.03J	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		728	706	636	648	588
Total Organic Carbon	(mg/l)		1.6	1.4	0.9J	1.2	1.6
Total suspended solids	(mg/l)		8	8	20	16	48

See Notes at End of Table

Table 6
 Summary of Groundwater Analytical Results for Sentinel Wells
 General Chemistry and Natural Attenuation Parameters

The Hartford Working Group / Hartford, Illinois
 1190505040 - Madison County - ILR000128249

PERIOD: From 12/16/2003 thru 01/16/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-29
	SAMPLE ID	HMW-29/061012	HMW-29/070116
	DATE	COMPARISON	
	RESULT TYPE	VALUE	Primary
Alkalinity (as CaCO ₃)	(mg/l)	460	478
Ammonia (as N)	(mg/l)	<0.08	<0.10
Chloride	(mg/l)	200	17
COD _{cr}	(mg/l)	<20	<20
Cyanide	(mg/l)	0.2	<0.007
Hardness (as CaCO ₃)	(mg/l)	620	530
Nitrate (as N)	(mg/l)	10	0.051S
Nitrate Plus Nitrite (as N)	(mg/l)	0.056S	<0.050
Nitrite (as N)	(mg/l)	<0.010	<0.010
Phosphorus	(mg/l)	0.116	0.074
Phosphorus (Dissolved)	(mg/l)	0.089	0.072
Sulfate	(mg/l)	400	65
Sulfide	(mg/l)	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)	616	608
Total Organic Carbon	(mg/l)	1.6	1.1
Total suspended solids	(mg/l)	20	14

See Notes at End of Table



NOTES

TABLES 4, 5, and 6

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives (35 IAC Part 742). Groundwater quality values listed in 35 IAC Part 742 used for comparison purposes only.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

NA = Constituent not analyzed by laboratory.

B = Analyte detected in the associated Method Blank.

R = RPD outside accepted recovery limits.

S = Spike Recovery outside accepted recovery limits.



APPENDIX A

MONITORING WELL INSPECTION REPORT

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Hw 6

Project No.: 07003-003095, 15-009

Date(s) of Inspection:

Field Personnel: Amanda Reddick / Sherri Marlo

WELL INTEGRITY INFORMATION

ADDITIONAL COMMENTS: ① Missing Bolt ② Pump in well



APPENDIX B

SUMMARY OF INDICATOR PARAMETER MEASUREMENTS – OCTOBER 2006

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD WORKING GROUP-07003-003095.15-007-HMW-25-1-15-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder where Win-Situ® is install

Operator Name: T_GRISEL
 Company Name: CLAYTON-BV
 Project Name: HARTFORD WORKING GROUP
 Site Name: 07003-003095.15-007
 Well ID: HMW-25/070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 33 [ft]
 Well Depth: 35.14 [ft]
 Well Diam: 2 [in]
 Screen Len: 176.4 [in]
 Screen Depth: 23.67 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 29.72 [ft]
 Pump Level (TOC): 31.72 [ft]

Final Pumping Rate: 188 [mL/min]
 Stable Draw Down: 0 [ft]

Volume = cup (200 mL) + tubing (147.3 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)

264.29 [mL]

264.29 [mL]

85 [sec]

85 [sec]

Start date/time: 1/15/2007 9:32:36
 End date/time: 1/15/2007 9:39:11
 Total Time: 0:06:35

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm @25C]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.67	6.67	228.59	228.59	3.38	3.38			1171.87	1171.87	-0.01	-0.01	12.98	12.98	9:32:36
3	6.67	0	224.79	-3.8	1.49	-1.89			1165.41	-6.47	-0.31	-0.3	13.79	0.81	9:34:04
2	6.68	0.02	223.33	-1.45	0.93	-0.56			1176.43	11.02	0.24	0.55	13.94	0.15	9:35:31
1	6.7	0.01	221.96	-1.37	0.73	-0.21			1179.87	3.44	0.24	0	14.01	0.06	9:36:59
0	6.71	0.02	219.95	-2.01	0.64	-0.08			1180.35	0.48	0.39	0.15	13.96	-0.05	9:38:27

pH Min: 6.67
 pH Max: 6.71
 ORP Min: 219.95
 ORP Max: 228.59
 DO Min: 0.64
 DO Max: 3.38
 RDO Min:
 RDO Max:
 Cond Min: 1165.41
 Cond Max: 1180.35
 Turb Min: -0.31
 Turb Max: 0.39
 Temp Min: 12.98
 Temp Max: 14.01

Notes: TURBIDITY<10NTU

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 11:07:22
Report from file: ...HARTFORD WORKING GROUP-07003-003095.15-007-HMW-25-1-15-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 9:32:36
Test started on: 1/15/2007 9:32:36
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 5

TOTAL DATA SAMPLES 5

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	9:32:36	0	12.98	29.612		0	2.811	229	6.67	3.38	32.5269
1/15/2007	9:34:04	88	13.79	29.612		-0.3	2.785	225	6.67	1.49	14.592
1/15/2007	9:35:31	175	13.94	29.613		0.2	2.811	223	6.68	0.93	9.176
1/15/2007	9:36:59	263	14.01	29.614		0.2	2.811	222	6.7	0.73	7.1606
1/15/2007	9:38:27	351	13.96	29.614		0.4	2.785	220	6.71	0.64	6.3203

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD SENTINEL WELL SAMPLING GROUP-07003-003095.15-007-HMW-26-070115-1-15-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder where Win-Situ® is

Operator Name: T_GRISEL
 Company Name: CLAYTON-BV
 Project Name: HARTFORD WORKING GROUP
 Site Name: 07003-003095.15-007
 Well ID: HMW-26-070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 34 [ft]
 Well Depth: 35.59 [ft]
 Well Diam: 2 [in]
 Screen Len: 176.4 [in]
 Screen Depth: 24.61 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 27.92 [ft]
 Pump Level (TOC): 29.92 [ft]

Final Pumping Rate: 400 [mL/min]
 Stable Draw Down: 0 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (151.8 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 268.76 [mL]
 Actual Total Volume: 268.76 [mL]
 Calculated Measurement Interval: 41 [sec]
 Actual Measurement Interval: 41 [sec]

Start date/time: 1/15/2007 10:58:41
 End date/time: 1/15/2007 11:10:29
 Total Time: 0:11:48

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm @25C]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.65	0	-88.96	-0.47	0.37	0			1718.74	2.58	19.29	1.55	14.88	-0.15	11:07:09
3	6.65	0	-89.52	-0.56	0.4	0.03			1719.59	0.85	15.74	-3.55	14.88	0	11:07:50
2	6.65	0	-90.07	-0.56	0.37	-0.03			1715.75	-3.84	17.09	1.35	14.75	-0.13	11:08:33
1	6.65	0	-90.68	-0.6	0.4	0.03			1718.27	2.52	18.21	1.12	14.83	0.08	11:09:14
0	6.65	0	-91.15	-0.47	0.4	0			1719.38	1.11	18.02	-0.19	14.84	0.01	11:09:56

pH Min: 6.65
 pH Max: 6.65
 ORP Min: -91.15
 ORP Max: -88.96
 DO Min: 0.37
 DO Max: 0.4
 RDO Min:
 RDO Max:
 Cond Min: 1715.75
 Cond Max: 1719.59
 Turb Min: 15.74
 Turb Max: 19.29
 Temp Min: 14.75
 Temp Max: 14.88

Notes:

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 10:56:49
Report from file: ...\\HARTFORD WORKING GROUP-07003-003095.15-007-HMW-26-070115-1-15-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 10:58:41
Test started on: 1/15/2007 10:58:41
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 17

TOTAL DATA SAMPLES 17

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

BUREAU VERITAS

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	10:58:41	0	10.03	29.658	31.6	2.785	-88	6.85	13.08	117.6574	1262.86
1/15/2007	10:59:23	42	13.73	29.66	29.4	2.811	-78	6.65	5.53	54.0692	1351.33
1/15/2007	11:00:05	84	14.51	29.663	28.3	2.811	-78	6.63	2.51	24.9461	1368.24
1/15/2007	11:00:47	126	14.71	29.664	35.4	2.785	-80	6.63	1.45	14.4552	1376.04
1/15/2007	11:01:30	169	14.7	29.665	25.7	2.785	-82	6.64	0.97	9.7117	1381.84
1/15/2007	11:02:13	212	14.54	29.664	25.1	2.785	-83	6.64	0.73	7.288	1381.01
1/15/2007	11:02:54	253	14.67	29.666	28.1	2.785	-84	6.64	0.55	5.4922	1380.18
1/15/2007	11:03:37	296	14.88	29.669	24.7	2.811	-85	6.64	0.51	5.0899	1383.92
1/15/2007	11:04:20	339	15.01	29.673	24.6	2.811	-86	6.64	0.45	4.5667	1389.79
1/15/2007	11:05:01	380	15	29.674	21	2.785	-87	6.64	0.39	3.9289	1389.37
1/15/2007	11:05:43	422	14.93	29.674	17.2	2.811	-88	6.65	0.4	4.0369	1391.48
1/15/2007	11:06:26	465	15.03	29.672	17.7	2.785	-88	6.65	0.37	3.7077	1389.37
1/15/2007	11:07:09	508	14.88	29.674	19.3	2.785	-89	6.65	0.37	3.7327	1386.44
1/15/2007	11:07:50	549	14.88	29.674	15.7	2.785	-90	6.65	0.4	4.0156	1387.28
1/15/2007	11:08:33	592	14.75	29.678	17.1	2.811	-90	6.65	0.37	3.7135	1379.77
1/15/2007	11:09:14	633	14.83	29.681	18.2	2.811	-91	6.65	0.4	4.0333	1384.35
1/15/2007	11:09:56	675	14.84	29.683	18	2.811	-91	6.65	0.4	4.0365	1385.6

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HMW.GRD
 WORKING GROUP-HMW-27-070115-1-15-2007.flw To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-27-070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE

Tubing Diam:	0.17 [in]
Tubing Length:	34 [ft]
Well Depth:	35.03 [ft]
Well Diam:	2 [in]
Screen Len:	176.4 [in]
Screen Depth:	24.62 [ft]
Pump Inlet Depth:	0 [in]
Depth to Water:	33.16 [ft]
Pump Level (TOC):	34 [ft]

Final Pumping Rate:	180 [mL/min]
Stable Draw Down:	0.1 [ft]

Volume = cup (200 mL) + tubing (151.8 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)

Calculated Total Volume:	268.76 [mL]
Actual Total Volume:	268.76 [mL]
Calculated Measurement Interval:	90 [sec]
Actual Measurement Interval:	90 [sec]

Start date/time:	1/15/2007 14:47:04
End date/time:	1/15/2007 14:59:55
Total Time:	0:12:51

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO [J]	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.66	-0.01	9.24	-2.48	0.51	-0.13			1094.24	3.91	13.27	-2.15	14.73	0.25	14:53:16
3	6.66	-0.01	7.61	-1.63	0.47	-0.03			1099.76	5.51	11.54	-1.73	14.86	0.13	14:54:49
2	6.65	0	6.33	-1.29	0.47	0			1097.14	-2.62	10.54	-1	14.83	-0.03	14:56:23
1	6.65	0	5.68	-0.65	0.44	-0.03			1096.88	-0.26	6.41	-4.13	14.75	-0.08	14:57:56
0	6.65	0	4.78	-0.9	0.43	-0.01			1097.67	0.79	8.2	1.79	14.85	0.1	14:59:29

pH Min:	6.65
pH Max:	6.66
ORP Min:	4.78
ORP Max:	9.24
DO Min:	0.43
DO Max:	0.51
RDO Min:	
RDO Max:	
Cond Min:	1094.24
Cond Max:	1099.76
Turb Min:	6.41
Turb Max:	13.27
Temp Min:	14.73
Temp Max:	14.86

Notes:

TURBIDITY<=10NTU

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 11:16:43

Report from file: ...\\HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-27-070115-1-15-2007.flo.bin

Win-Situ® Version 4.57.0.0

Serial number: 45176

Firmware Version 2

Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 14:47:04

Test started on: 1/15/2007 14:47:04

Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds.

Time between default storage: 0.0 Seconds.

Monitoring data on channel [1]

Data stored if delta value exceeds: 0 Celsius

Number of data samples: 9

TOTAL DATA SAMPLES 9

Channel number [1]

Measurement type: Temperature

Channel name:

Channel number [3]

Measurement type: Barometric Pressure

Channel name:

Channel number [4]

Measurement type: Turbidity

Channel name:

Channel number [5]

Measurement type: Battery Voltage

Channel name:

Channel number [11]

Measurement type: ORP

Channel name:

Channel number [12]

Measurement type: pH

Channel name:

Channel number [25]

Measurement type: Dissolved Oxygen

Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	14:47:04	0	6.03	29.676	34.9	2.811	41	6.85	16.51	134.47	930.7
1/15/2007	14:48:37	93	13.46	29.675	28.6	2.837	25	6.66	2.79	27.0954	1083.38
1/15/2007	14:50:09	185	14.08	29.677	24.4	2.811	16	6.67	1.04	10.2816	1090.59
1/15/2007	14:51:43	279	14.47	29.684	15.4	2.837	12	6.67	0.64	6.3217	1090.34
1/15/2007	14:53:16	372	14.73	29.69	13.3	2.811	9	6.66	0.51	5.0787	1094.24
1/15/2007	14:54:49	465	14.86	29.696	11.5	2.811	8	6.66	0.47	4.7504	1099.76
1/15/2007	14:56:23	559	14.83	29.698	10.5	2.811	6	6.65	0.47	4.7254	1097.13
1/15/2007	14:57:56	652	14.75	29.698	6.4	2.811	6	6.65	0.44	4.4283	1096.88
1/15/2007	14:59:29	745	14.85	29.7	8.2	2.811	5	6.65	0.43	4.334	1097.67

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-28-070115-1-15-2007.flw To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-28-070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 35 [ft]
 Well Depth: 36.02 [ft]
 Well Diam: 2 [in]
 Screen Len: 176.4 [in]
 Screen Depth: 24.67 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 33.11 [ft]
 Pump Level (TOC): 34.5 [ft]

Final Pumping Rate: 330 [mL/min]
 Stable Draw Down: 0.2 [ft]

Total Volume Formula: Volume = cup (200 mL) + tubing (156.2 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)

Calculated Total Volume: 273.22 [mL]

Actual Total Volume: 273.22 [mL]

Calculated Measurement Interval: 50 [sec]

Actual Measurement Interval: 50 [sec]

Start date/time: 1/15/2007 15:48:56
 End date/time: 1/15/2007 15:56:49
 Total Time: 0:07:53

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.71	-0.03	145.16	-1.84	2.15	-3.02			919.32	9.48	1.35	0.04	14.19	1.12	15:52:45
3	6.71	0	143.32	-1.84	1.24	-0.91			924.7	5.37	2.28	0.93	13.93	-0.26	15:53:36
2	6.71	0	142.42	-0.9	0.85	-0.39			928.44	3.74	1.95	-0.33	14.13	0.2	15:54:28
1	6.71	0	141.3	-1.11	0.75	-0.1			930.52	2.07	1.52	-0.43	14.39	0.26	15:55:20
0	6.71	0	140.4	-0.9	0.63	-0.12			933.36	2.84	1.46	-0.06	14.19	-0.2	15:56:10

pH Min: 6.71
 pH Max: 6.71
 ORP Min: 140.4
 ORP Max: 145.16
 DO Min: 0.63
 DO Max: 2.15
 RDO Min:
 RDO Max:
 Cond Min: 919.32
 Cond Max: 933.36
 Turb Min: 1.35
 Turb Max: 2.28
 Temp Min: 13.93
 Temp Max: 14.39

Notes:

TURBIDITY<=10NTU

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 11:13:30
Report from file: ...HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-28-070115-1-15-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 15:48:56
Test started on: 1/15/2007 15:48:56
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 8

TOTAL DATA SAMPLES 8

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	15:48:56	0	-0.21	29.704	3.9	2.811	144	8.95	16.17	110.7747	1.38
1/15/2007	15:51:02	126	11.3	29.708	1.5	2.811	150	7.04	12.82	118.3157	862.16
1/15/2007	15:51:53	177	13.07	29.708	1.3	2.811	147	6.74	5.18	49.7612	909.85
1/15/2007	15:52:45	229	14.19	29.71	1.3	2.811	145	6.71	2.15	21.211	919.32
1/15/2007	15:53:36	280	13.93	29.711	2.3	2.811	143	6.71	1.24	12.1614	924.7
1/15/2007	15:54:28	332	14.13	29.713	1.9	2.811	142	6.71	0.85	8.354	928.44
1/15/2007	15:55:20	384	14.39	29.716	1.5	2.811	141	6.71	0.75	7.3997	930.52
1/15/2007	15:56:10	434	14.19	29.721	1.5	2.811	140	6.71	0.63	6.2316	933.36

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file, HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HMW-GRD WORKING GROUP-HMW-29-070116-1-16-2007.xls. To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-29-070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type:	DEDICATED
Tubing Type:	POLYETHYLENE
Tubing Diam:	0.17 [in]
Tubing Length:	33.5 [ft]
Well Depth:	34.55 [ft]
Well Diam:	2 [in]
Screen Len:	176.4 [in]
Screen Depth:	24.86 [ft]
Pump Inlet Depth:	0 [in]
Depth to Water:	31.47 [ft]
Pump Level (TOC):	33.5 [ft]

Final Pumping Rate:	270 [mL/min]
Stable Draw Down:	0.37 [ft]
Total Volume Formula:	Volume = cup (200 mL) + tubing (149.5 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	266.53 [mL]
Actual Total Volume:	266.53 [mL]
Calculated Measurement Interval:	60 [sec]
Actual Measurement Interval:	60 [sec]

Start date/time:	1/16/2007	9:49:32
End date/time:	1/16/2007	10:06:30
Total Time:		0:16:58

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.69	0	-60.62	-0.81	0.52	0			812.84	0.86	22.41	-1.72	14.83	0.03	10:01:55
3	6.7	0	-61.17	-0.56	0.47	-0.05			812.84	0	20.51	-1.9	14.8	-0.03	10:02:57
2	6.7	0	-61.73	-0.56	0.52	0.05			811.97	-0.86	15.14	-5.37	14.84	0.04	10:03:59
1	6.7	0	-62.24	-0.51	0.52	0			812.12	0.14	14.89	-0.24	14.74	-0.1	10:05:01
0	6.7	0	-62.93	-0.68	0.53	0.01			810.11	-2	13.82	-1.07	14.53	-0.21	10:06:03

pH Min:	6.69
pH Max:	6.7
ORP Min:	-62.93
ORP Max:	-60.62
DO Min:	0.47
DO Max:	0.53
RDO Min:	
RDO Max:	
Cond Min:	810.11
Cond Max:	812.84
Turb Min:	13.82
Turb Max:	22.41
Temp Min:	14.53
Temp Max:	14.84

Notes:

Device Record:

In-Situ Inc.

Troll 9000 Profiler XP

Report generated:

1/20/2007 11:11:06

Report from file:

...\\HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-29-070116-1-16-2007.flo.bin

Win-Situ® Version

4.57.0.0

Serial number:

45176

Firmware Version

2

Unit name:

MP Troll 9000

Test name:

LowFlow

Test defined on:

1/16/2007 9:49:32

Test started on:

1/16/2007 9:49:32

Test stopped on:

N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds.

Time between default storage: 0.0 Seconds.

Monitoring data on channel [1]

Data stored if delta value exceeds: 0 Celsius

Number of data samples: 17

TOTAL DATA SAMPLES

17

Channel number [1]

Measurement type: Temperature

Channel name:

Channel number [3]

Measurement type: Barometric Pressure

Channel name:

Channel number [4]

Measurement type: Turbidity

Channel name:

Channel number [5]

Measurement type: Battery Voltage

Channel name:

Channel number [11]

Measurement type: ORP

Channel name:

Channel number [12]

Measurement type: pH

Channel name:

Channel number [25]

Measurement type: Dissolved Oxygen

Channel name:

Channel number [25]

Dissolved Oxygen %Saturation

Measurement type:

Channel name:

Channel number [45]

Conductivity, Low Range

Measurement type:

Channel name:

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	9:49:32	0	10.66	30.131	100.3	2.785	72	6.77	11.43	102.4208	731.39
1/16/2007	9:50:33	61	14.5	30.133	78.8	2.785	-4	6.68	3.1	30.2744	776.09
1/16/2007	9:51:35	123	14.68	30.136	72.3	2.785	-23	6.69	1.64	16.0566	785.23
1/16/2007	9:52:37	185	14.64	30.137	76.1	2.785	-36	6.69	1.15	11.2609	794.18
1/16/2007	9:53:40	248	14.69	30.141	65.1	2.811	-44	6.69	0.9	8.8503	801.66
1/16/2007	9:54:43	311	14.65	30.143	54.5	2.785	-49	6.69	0.67	6.5881	805.16
1/16/2007	9:55:44	372	14.7	30.145	50	2.785	-53	6.69	0.61	6.0197	808.7
1/16/2007	9:56:46	434	14.81	30.149	42.2	2.785	-55	6.69	0.56	5.4836	811.41
1/16/2007	9:57:48	496	14.81	30.151	37.5	2.785	-57	6.69	0.52	5.1273	812.12
1/16/2007	9:58:50	558	14.79	30.153	38	2.811	-58	6.69	0.51	5.0092	811.4
1/16/2007	9:59:51	619	14.8	30.156	29.9	2.811	-59	6.69	0.53	5.2371	811.69
1/16/2007	10:00:54	682	14.79	30.157	24.1	2.811	-60	6.69	0.53	5.1577	811.97
1/16/2007	10:01:55	743	14.83	30.161	22.4	2.811	-61	6.69	0.52	5.1501	812.84
1/16/2007	10:02:57	805	14.8	30.161	20.5	2.811	-61	6.7	0.47	4.6127	812.84
1/16/2007	10:03:59	867	14.84	30.16	15.1	2.811	-62	6.7	0.52	5.1104	811.97
1/16/2007	10:05:01	929	14.74	30.161	14.9	2.785	-62	6.7	0.52	5.1282	812.12
1/16/2007	10:06:03	991	14.53	30.161	13.8	2.811	-63	6.7	0.53	5.1647	810.11